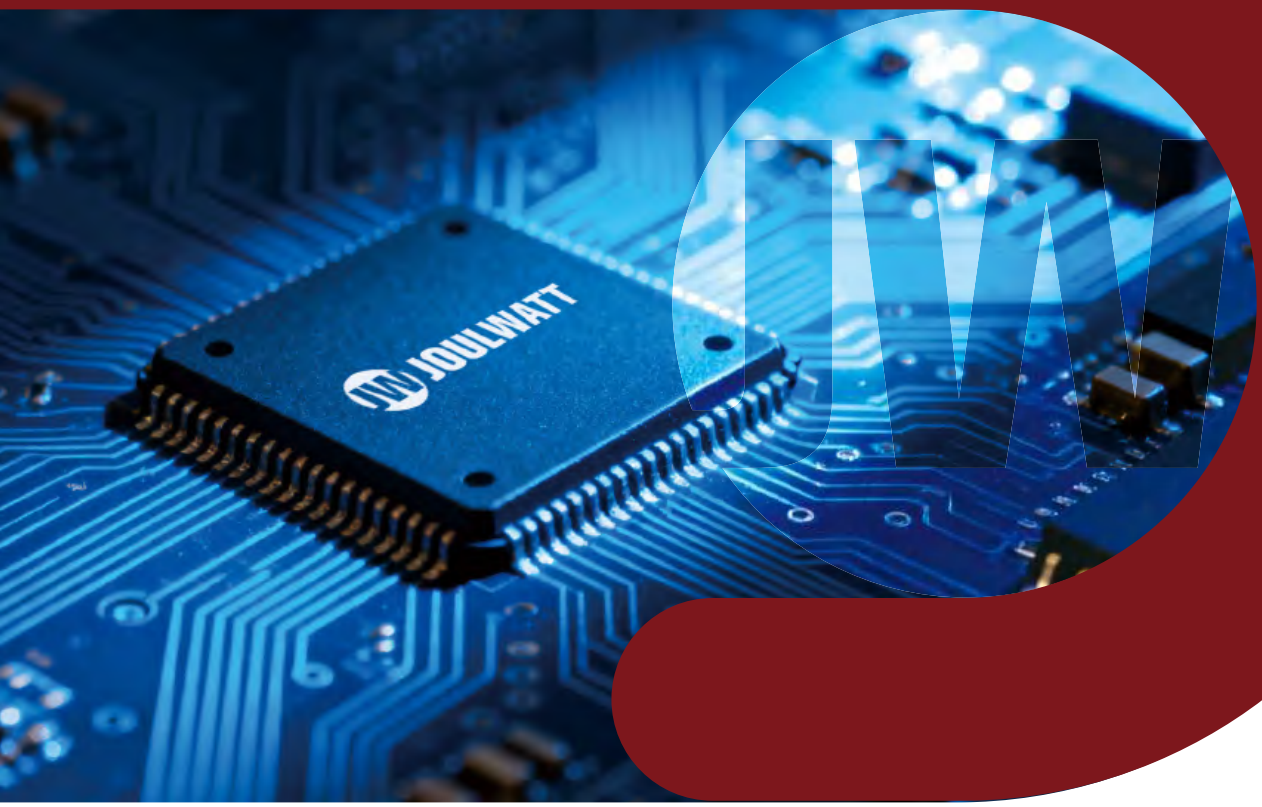
JOULWATT

Stock Ticker: 688141
JoulWatt Technology Co., Ltd.

2026Q1
Selection Guide



https://www.joulwatt.com

Stock Name **JoulWatt**

Stock Ticker **688141**

COMPANY PROFILE

JoulWatt Technology Co.,Ltd.,founded in March 2013,is a mixed-signal and power management analog IC design company operating under a virtual IDM model.The company leverages its proprietary (Bipolar -CMOS-DMOS) BCD process technology in chip design andmanufacturing.

It is committed to delivering analog ICs including power management and signal chain solutions with high efficiency,performance and reliability,providing customers with acomprehensive,end-to-end solution for their analog semiconductor requirements.

Company Employees

1600+

Proportion of R&D Personnel

60%+

Sales Revenue by 3Q25

$277 Million+

R&D Investment by 3Q25

$96.8 Million+

Available Products

3200+

Number of Patents
(Including those under application)

1500+

*1 USD ≈ 7.0073 CNY

JOULWATT

PRODUCT INNOVATION

MEMORABILIA

2013
- Mobile Power SoC
- LED Ripple-Elimination Chip

2014
- 40V Synchronous Buck Chip

2015
- Linear LED Driver

2016
- Medium and Low Voltage DC/DC Series Chip

2017
- 10A Minimum Packaging DC/DC
- 14S BMS Analog Front End

2018
- Ultra-Low Power DC/DC Chip

2019
- ACF Fast Charging Control Chip
- 60V/5A DC/DC

2020
- High-Frequency Fast Charging SR Chip
- 60A DrMOS
- 100V High Voltage DC/DC Controller

2021
- 16-Series BMS Front-end Simulation
- 120V Half-Bridge MOS Drive
- PSE BT Controller Chip PSE BT

2022
- AHB Fast Charging Controller IC
- 100V High-Side Drive
- Automotive 5~100V DC/DC Series Chip

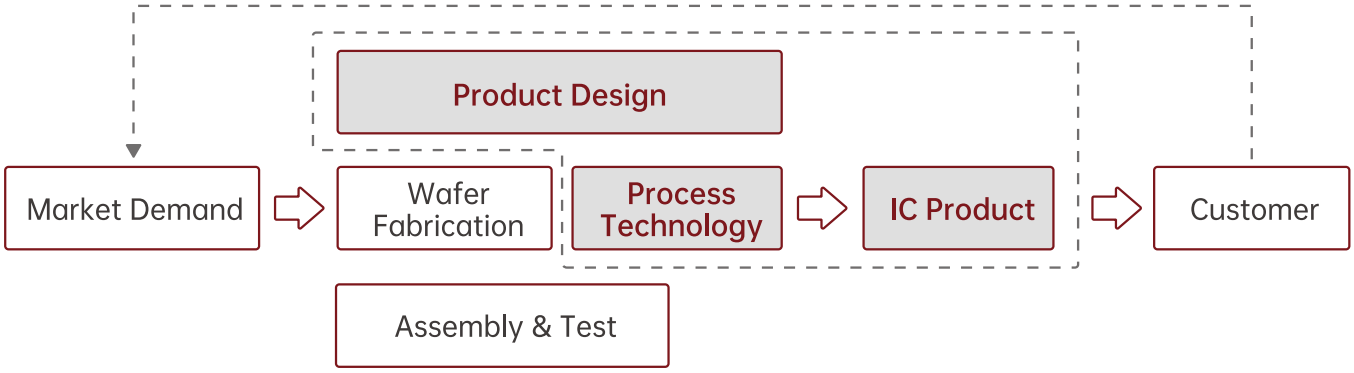
2023
- 50A eFuse
- 90A DrMOS

2024
- 200V PMIC
- DDR5 PMIC
- 16-Phase Digital Controller
- 64-Channel AD/DA

2025
- ASIL-D PMIC
- Automotive 4-Phase Controller
- Three-Level Charging Chip
- Automotive 48V DC/DC

2026
- More Products Coming Soon

JOULWATT VIRTUAL IDM MODE



Effective system architecture

Advanced chip circuit and package design

JoulWatt's proprietary semiconductor process

EXTENSIVE PRODUCT PORTFOLIO

JoulWatt offers an extensive portfolio of analog ICs,spanning more than 50 product categories and comprising over 3,200 available products,with new offerings introduced every year.

DC/DC	AC/DC	Automotive	Linear Power
Power Module	LED Lighting	Charger/BMS	Sensor
Display Driver IC	Power Discrete	General-Purpose Analog ICs	Motor Drive
Clock Buffer and High Speed Interface			

EXTENSIVE MARKET LAYOUT

JoulWatt offers broad market coverage across consumer electronics,industrial applications,enterprise systems and automotive electronics,delivering one-stop analog solutions to end customers.

Consumer Electronics

Smartphones, TVs, Monitors, etc.

Industrial Application

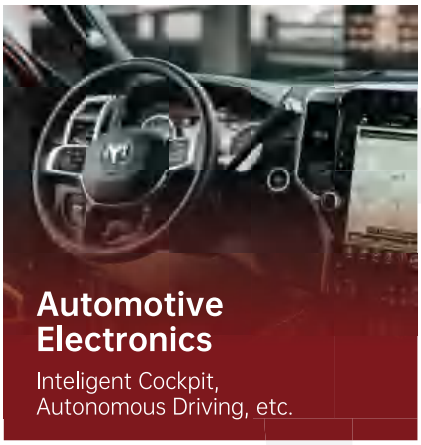
New Energy, Industrial Control, Robotics, etc.

Computing and Storage

Servers, Data Centers, PC, etc.

Communication Electronics

Wireless Infrastructure, Switches, Network Terminals, etc.



Automotive Electronics

Inteligent Cockpit, Autonomous Driving, etc.

STRINGENT QUALITY MANAGEMENT SYSTEM

JoulWatt is committed to a stringent quality management system and has obtained multiple authoritative quality management certifications,ensuring the superior quality and reliable performance of its products.

- **ISO9001** Quality System Certification
- **ISO14001** Environmental Management System Certification
- **IATF16949** Automotive Quality Management System
- **ISO26262** Functional Safety System Certification
- **ISO45001** Occupational Health and Safety Management System
- **QC080000** Hazardous Substances Process Management System
- **National Intellectual Property Management System Certification**

DIRECTORY

01 Switching DC/DC Power Supply

02 Vcore Power

03 AC/DC Power Supply

04 Battery Management System

05 Linear Power Supply

06 H-Bridge

07 Gate Driver

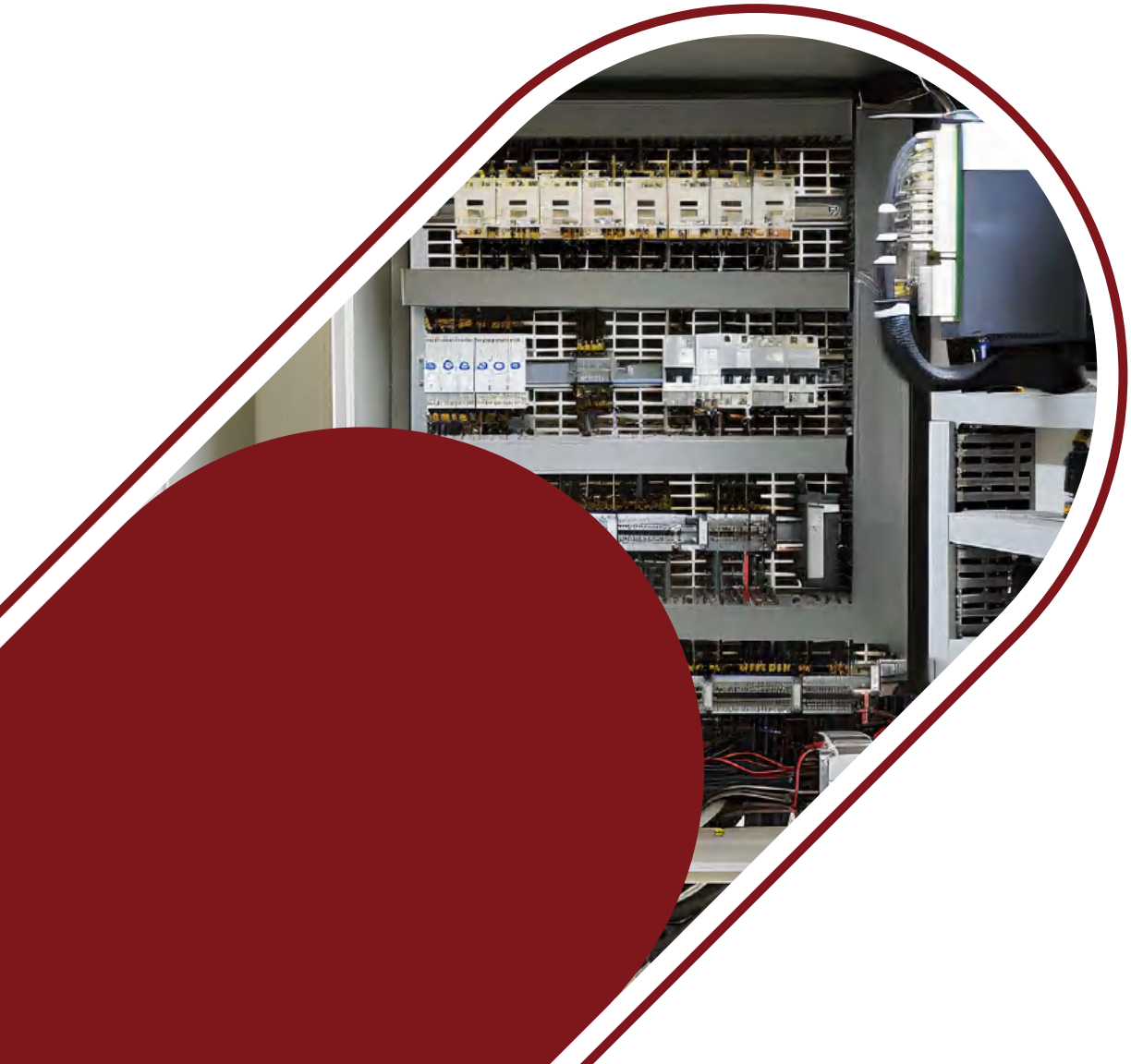
12 Automotive Products

13 LED Lighting

01

Switching DC/DC Power Supply

JoulWatt provides a series of isolated or non-isolated DC/DC power supply products, including step-down,-step-up, buck-boost, and flyback regulators, etc.



JW5100A/B

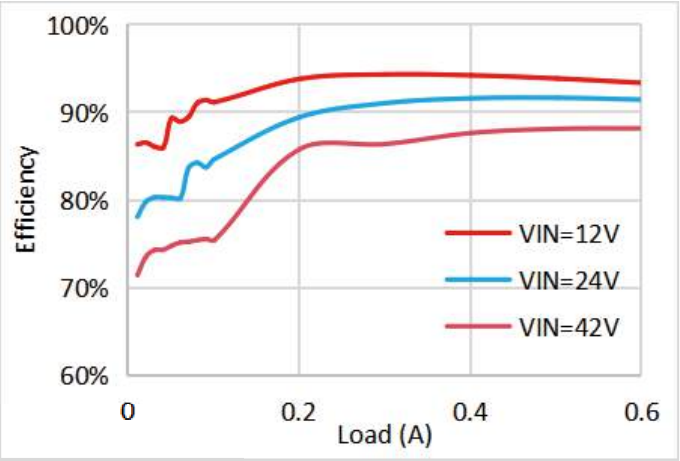
42V/600mA, synchronous buck converter optimized for EMI performance

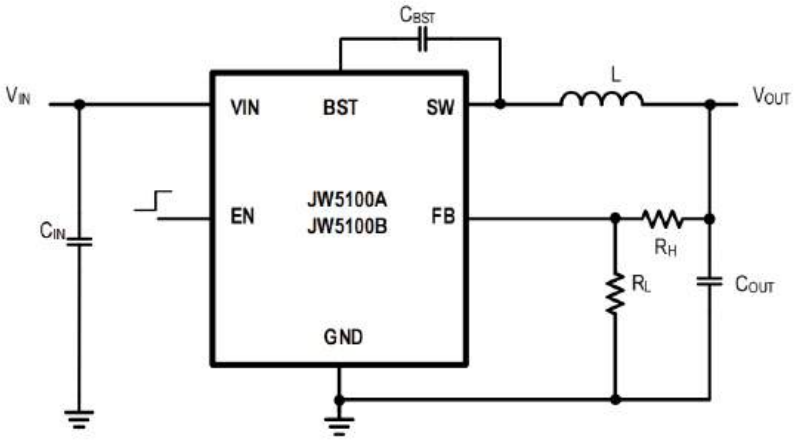
Key Features

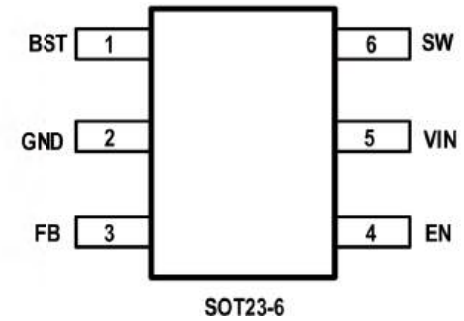
- 4.5V~42V operating input range, 48V Vin Abs
- 600mA output current
- Low dropout operating mode, up to 98% duty cycle
- 700kHz switching frequency(JW5100A)
- 2.1MHz switching frequency (JW5100B)
- FSS for EMI reduction
- ±1% FB accuracy
- Current run-away protection
- Hiccup short-circuit protection
- Over-temperature protection

Application Fields

- General wide input voltage powersupply
- Smart grid
- Motor drive systems
- Industrialautomation
- Smart buildings







JWM9215AEC

2V/15A Sync. Step-Down Converter Module

Key Features

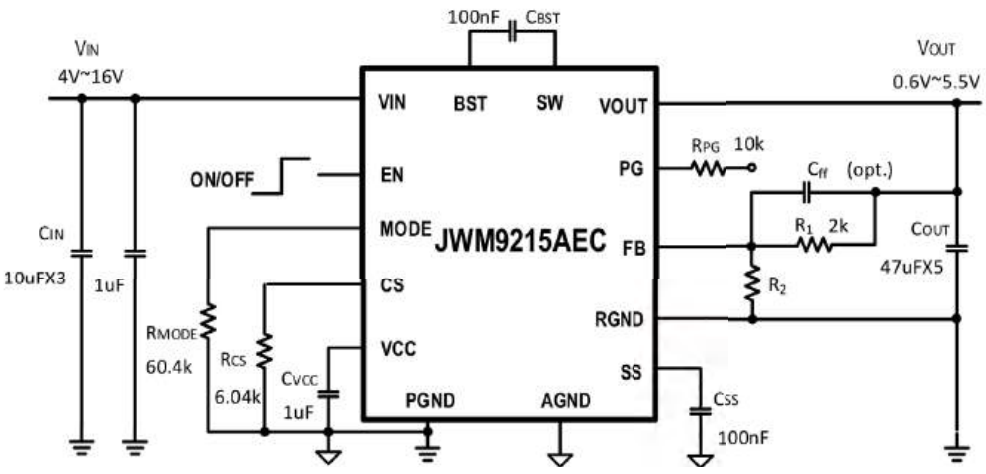
- 2.7V to 16V operating input range with external 3.3V VCC bias
- 4V to 16V operating input range with internal bias or external 3.3V VCC bias
- 15A output current
- Differential output voltage remote sense
- Programmable accurate current limit level
- ±1% reference voltage over -40℃ to +125℃ junction temperature range
- FCCM operation mode
- Power good indicator
- Programmable soft-start time
- Selectable switching frequency from 700kHz, 800kHz, and 1000kHz
- Output discharge function
- Non-latch OCP, UVP, OVP, UVLO
- Thermal protection

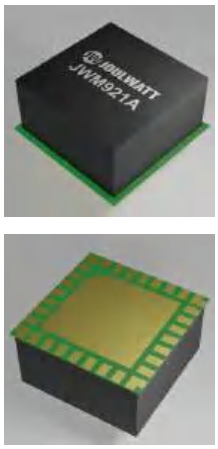
Benefits

- Small size
- High Efficiency
- Good thermal performance

Application Fields

- Telecom and Networking Systems Server
- Cloud-Computing, Storage
- Base Stations
- General Purpose Point-of-Load



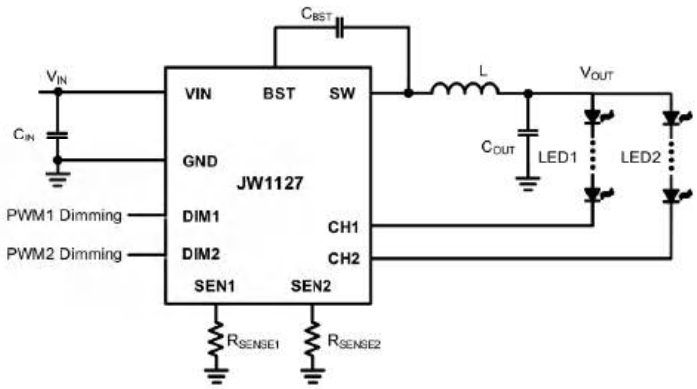


LGA5X5X2.5-32 package

JW1127

28V/2A synchronous buck converter with integrated dual channel LED drivers

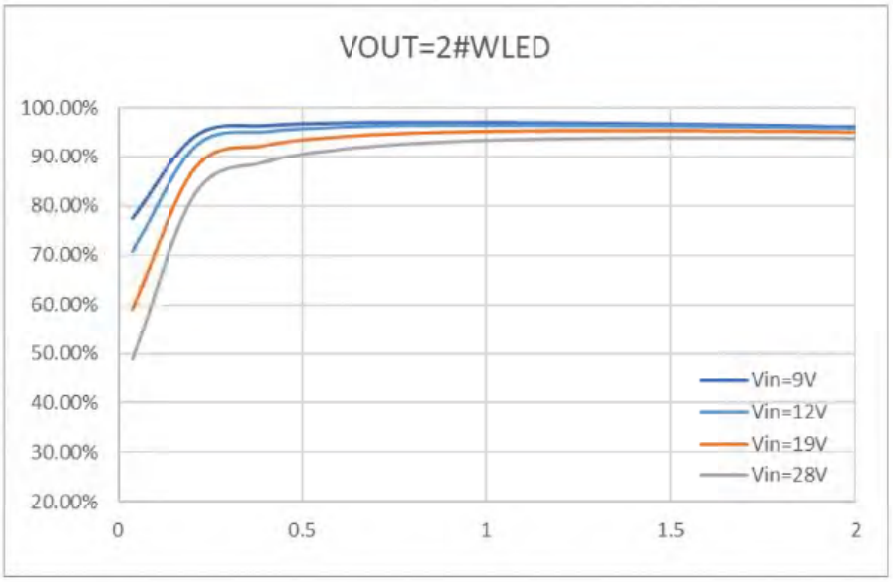
Key Features



- 4.5V to 28V operating input range
- 2CH LED driver, 1A output current per channel
- 1MHz switching frequency
- Low to 1% LED rated current regulation
- High accuracy low brightness regulation
- Input under voltage lockout
- Startup current run-away protection
- LED+ and LED- short circuit protection/open circuit protection
- LED+ and GND short circuit protection
- SENSE pin short circuit protection/open circuit protection
- Over-temperature protection

Application Fields

- IP camera and CCD camera
- Flash light
- Display cabinet lamp
- General LED lighting



JWH3511H

48V VIN Micropower No-Opto Isolated Flyback Converter

Key Features

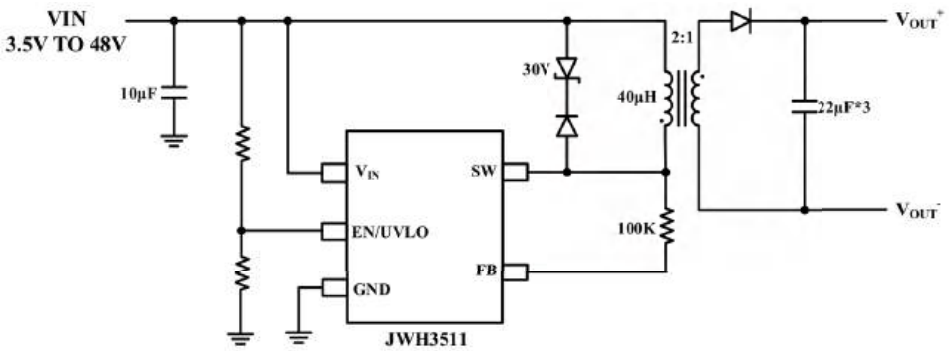
- 3.5V to 48V Operating Input Range
- 1.6A 75V Internal DMOS Power Switch
- Up to 620kHz Operating Frequency
- Low Quiescent Current
- Boundary Mode Operation at Heavy Load
- Burst Mode Operation at Light Load
- VOUT Set with a Single External Resistor
- Minimum Load<0.5% (Typ.) of Full Output
- No Transformer Third Winding or Opto-Isolator Required for Regulation
- Internal Compensation and Soft-Start
- Input under Voltage Lockout
- Output Short-Circuit Protection
- Thermal Protection

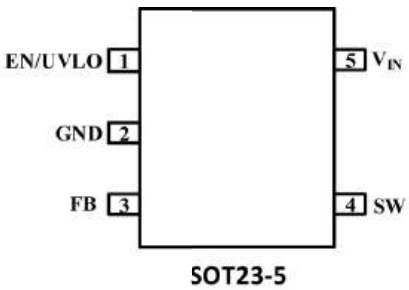
Benefits

- Low VIN Quiescent Current
- Supports Lower Inductance Transformers

Application Fields

- Isolated Telecom
- Industrial





JWH3513

72V VIN Micropower No-Opto Isolated Flyback Converter

Key Features

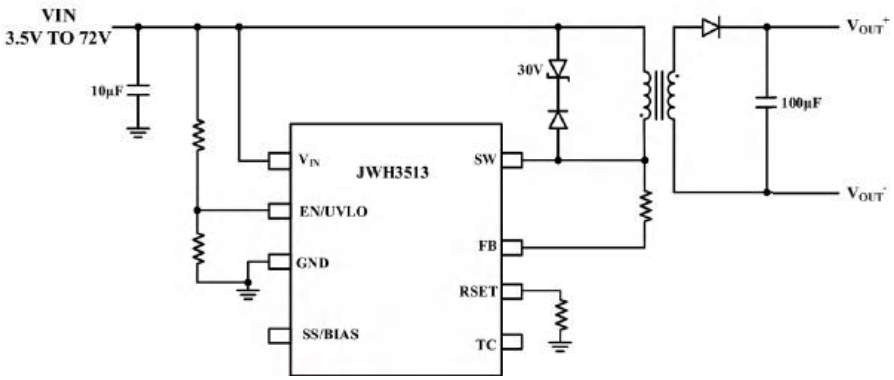
- 3.5V to 72V Operating Input Range
- 1.6A, 100V Internal DMOS Power Switch
- Up to 400kHz Operating Frequency
- Low Quiescent Current
- Boundary Mode Operation at Heavy Load
- Burst Mode Operation at Light Load
- VOUT Set with a Single External Resistor
- Minimum Load<0.5% (Typ.) of Full Output
- No Transformer Third Winding or Opto- Isolator Required for Regulation
- Internal and Externally-programmable Soft Start
- Input under Voltage Lockout
- Output Short-Circuit Protection
- Thermal Protection

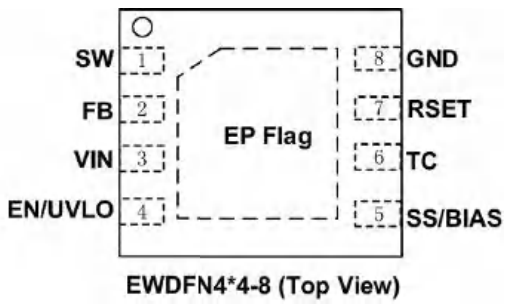
Benefits

- Low VIN Quiescent Current
- A Lower Minimum Switching Frequency Can Reduce No-Load Power Consumption
- Output Diode Temperature Compensation

Application Fields

- Isolated Telecom
- Industrial





EWDFN4*4-8 (Top View)

JOULWATT

Step-down Converter V_{IN} Max <10V

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5711	1	2.5~5.5	0.3	1.2~3.3	0.36	1000	N	Internal	PFM	Y	COT	WLCSP8
JW5711A	1	2.5~5.5	0.3	0.7~3.1	0.36	1000	N	Internal	PFM	Y	COT	WLCSP8
JW5716	2	2.5~5.5	0.3	0.7~3.3	0.36	1000	Y	Internal	PFM	Y	COT	DFN3*2-12
JW5710	2	3.3~10	0.4	1.8~3.3	0.4	1000	Y	Internal	PFM	Y	COT	DFN3*2-12
JW5715	2	3.3~10	0.4	1.8~3.3	0.4	1000	Y	Internal	PFM	Y	COT	DFN3*2-12
JW5712	1	2.3~5.5	0.6	1.2~3.3	0.36	1200	N	Internal	PFM	Y	COT	WLCSP8
JW5712A	1	2.3~5.5	0.6	0.7~3.1	0.36	1200	N	Internal	PFM	Y	COT	WLCSP8
JW5717	2	2.3~5.5	1.2	0.7~3.3	0.36	1000	Y	Internal	PFM	Y	COT	DFN3*2-12
JW5250A	1	2.7~6	1	0.6	40	1500	N	Internal	PFM	Y	COT	SOT23-5
JW5250S	1	2.7~6	1	0.6	40	1500	N	Internal	PFM	Y	COT	SOT563
JW5291	1	2.7~6	1	0.6	40	1500	N	Internal	PFM	Y	COT	SOT563
JW5291P	1	2.7~6	1	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT563
JW5291F	1	2.7~6	1	0.6	40	1500	N	Internal	FCCM	Y	COT	SOT563
JW5291PF	1	2.7~6	1	0.6	40	1500	Y	Internal	FCCM	Y	COT	SOT563
JW5256	1	2.7~6	1.2	0.6	40	1500	N	Internal	PFM	Y	COT	SOT23-5
JW5211*	1	2.5~6	1.2	0.6	50	1500	Y	Internal	PFM	Y	PCM	SOT23-5 / SOT23-6
JW5262C	1	2.6~6	1.5	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5262CM	1	2.6~6	1.5	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5262CF	1	2.6~6	1.5	0.6	40	1500	N/Y	Internal	FCCM	Y	COT	SOT23-5 / SOT23-6
JW5262CFM	1	2.6~6	1.5	0.6	40	1500	N/Y	Internal	FCCM	Y	COT	SOT23-5/SOT23-6
JW5231*	1	2.5~5.5	1.5	0.6	50	1500	Y	Internal	FCCM	Y	PCM	SOT23-5 / SOT23-6
JW5215	1	2.6~6	1.5	1.8	50	2700	N	Internal	PFM	Y	COT	DFN1.5*1.5-6
JW5217	1	2.5~6	2	0.45	30	2000	Y	Internal	PFM	Y	COT	DFN2*2-8
JW5292	1	2.7~6	2	0.6	47	1850	N	Internal	PFM	Y	COT	SOT563
JW5292P	1	2.7~6	2	0.6	47	1850	Y	Internal	PFM	Y	COT	SOT563
JW5292F	1	2.7~6	2	0.6	47	1850	N	Internal	FCCM	Y	COT	SOT563
JW5292PF	1	2.7~6	2	0.6	47	1850	Y	Internal	FCCM	Y	COT	SOT563
JW5223*	1	2.5~6	2	0.6	40	1500	Y	Internal	PFM	Y	PCM	SOT23-5 / SOT23-6
JW5252*	1	2.5~6	2	0.6	60	1000	Y	Internal	PFM	Y	COT	SOT23-5/TSOT23-8/ SOT23-6
JW5258	2	2.6~5.5	2	0.6	40	1500	Y	Internal	PFM	Y	COT	DFN2*2-10
JW5262N	1	2.6~6	2	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5262NM	1	2.6~6	2	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5262NF	1	2.6~6	2	0.6	40	1500	N	Internal	FCCM	Y	COT	SOT23-5
JW5262	1	2.7~6	2.5	0.6	40	1000	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5262M	1	2.7~6	2.5	0.6	40	1000	Y	Internal	PFM	Y	COT	SOT23-5
JW5262L	1	2.7~6	2.5	0.6	40	1000	Y	Internal	PFM	Y	COT	SOT23-5 / SOT23-6
JW5222N*	1	2.5~6	2.5	0.6	60	1000	Y	Internal	PFM	Y	PCM	SOT23-6
JW5213H*	1	2.5~6	3	0.6	50	1000	Y	Internal	PFM	Y	PCM	DFN2*2-8
JW5213L*	1	2.5~6	3	0.6	50	1000	Y	Internal	PFM	Y	PCM	DFN2*2-8
JW5214L	1	2.5~6	3	0.6	50	800	Y	Internal	PFM	Y	COT	DFN2*2-8
JW5263SH	1	2.5~6	3	0.6	50	1000	Y	Internal	PFM	Y	COT	DFN2*2-8
JW5263SL	1	2.5~6	3	0.6	50	1000	Y	Internal	PFM	Y	COT	DFN2*2-8

* Not recommended, Contact JoulWatt for New Designs

Step-down Converter VIN Max <10V

P/N	Regulated Outputs	VIN (V)	IOUT (A)	VFB (V)	IQ (uA)	FSW (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5219	1	2.5~5.5	3	0.6	65	1500	N	Adjustable	FCCM	Y	COT	QFN1.5*1.5-7
JW5219P	1	2.5~5.5	3	0.6	65	1500	Y	Internal	PFM	Y	COT	QFN1.5*1.5-7
JW5229	1	2.5~6	3	0.4	55	1700	Y	Internal	PFM	Y	COT	QFN1.5*1.5-7
JW5293	1	2.7~6	3	0.6	40	1500	N	Internal	PFM	Y	COT	SOT563
JW5293P	1	2.7~6	3	0.6	40	1500	Y	Internal	PFM	Y	COT	SOT563
JWH5280	1	2.5~6	3	0.8	40	2000	Y	Internal	PFM	Y	COT	DFN2*2-7
JW5255A*	1	2.5~5.5	5	0.6	60	1000	Y	Adjustable	PFM	Y	COT	DFN3*3-10
JW5265	1	2.5~5.5	5	0.6	60	1000	Y	Adjustable	PFM	Y	COT	DFN3*3-10
JW5265F	1	2.5~5.5	5	0.6	60	1000	Y	Adjustable	FCCM	Y	COT	DFN3*3-10
JW5266	1	2.5~5.5	6	0.6	60	1000	Y	Adjustable	PFM	Y	COT	DFN3*3-10
JWH5276	1	2.95~7	6	0.6	210	400~2400	Y	Adjustable	FCCM	Y	COT	QFN3*3-16

Step-down Converter VIN Max >10V

P/N	Regulated Outputs	VIN (V)	IOUT (A)	VFB (V)	IQ (uA)	FSW (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5033C*	1	4.5~18	2	0.8	100	700	N	Internal	PFM	Y	PCM	SOT23-6
JW5052C*	1	4.5~18	2	0.6	100	700	N	Internal	PFM	Y	PCM	SOT23-6
JW5059TC*	1	4.5~18	2	0.765	150	600	N	Internal	PFM	Y	COT	SOT23-6
JW5059TF*	1	4.5~18	2	0.765	150	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5092*	1	3.7~18	2	0.8	120	800	N	Internal	PFM	Y	PCM	TSOT23-6 / SOT563
JW5352	1	4.5~18	2	0.6	140	600	N	Internal	PFM	Y	COT	SOT23-6
JW5352H	1	4.5~18	2	0.6	140	1140	N	Internal	PFM	Y	COT	SOT23-6
JW5352M	1	4.5~18	2	0.6	140	600	N	Internal	PFM	Y	COT	SOT23-6
JW5352HF	1	4.5~18	2	0.6	140	1140	N	Internal	FCCM	Y	COT	SOT23-6
JW5352HM	1	4.5~18	2	0.6	140	1140	N	Internal	PFM	Y	COT	SOT23-6
JW5352HFM	1	4.5~18	2	0.6	125	1000	N	Internal	FCCM	Y	COT	SOT23-6
JW5359	1	4.5~18	2	0.765	140	600	N	Internal	PFM	Y	COT	SOT23-6
JW5359M	1	4.5~18	2	0.765	140	600	N	Internal	PFM	Y	COT	SOT23-6
JW5359F	1	4.5~18	2	0.765	140	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5359FM	1	4.5~18	2	0.765	140	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5360	1	4.5~18	2	0.6	140	600	N	Internal	PFM	Y	COT	DFN2*2-6
JW5092A*	1	4.5~18	2	0.8	140	600	N	Internal	PFM	Y	COT	SOT563
JW5092H*	1	4.5~18	2	0.8	140	1000	N	Internal	PFM	Y	COT	SOT563
JW5092AF*	1	4.5~18	2	0.8	140	600	N	Internal	FCCM	Y	COT	SOT563
JW5362H	1	4.5~18	2	0.6	150	1200	N	Internal	PFM	Y	COT	SOT563
JW5362HF	1	4.5~18	2	0.6	150	1200	N	Internal	FCCM	Y	COT	SOT563
JW5392	1	4.5~18	2	0.8	150	600	N	Internal	PFM	Y	COT	SOT563
JW5392F	1	4.5~18	2	0.8	150	600	N	Internal	FCCM	Y	COT	SOT563
JW5392H	1	4.5~18	2	0.8	150	1200	N	Internal	PFM	Y	COT	SOT563
JW5392HF	1	4.5~18	2	0.8	150	1200	N	Internal	FCCM	Y	COT	SOT563
JW5357	1	4.5~18	3	0.6	150	600	N	Internal	PFM	Y	COT	SOT23-6

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JOULWATT

Step-down Converter V_{IN} Max >10V

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5357M	1	4.5~18	3	0.6	150	600	N	Internal	PFM	Y	COT	SOT23-6
JW5357H	1	4.5~18	3	0.6	150	1140	N	Internal	PFM	Y	COT	SOT23-6
JW5357HF	1	4.5~18	3	0.6	150	1140	N	Internal	FCCM	Y	COT	SOT23-6
JW5357HM	1	4.5~18	3	0.6	150	1140	N	Internal	PFM	Y	COT	SOT23-6
JW5357HFM	1	4.5~18	3	0.6	122	1000	N	Internal	FCCM	Y	COT	SOT23-6
JW5061TC*	1	4.5~18	3	0.765	150	600	N	Internal	PFM	Y	COT	SOT23-6
JW5061TF*	1	4.5~18	3	0.765	150	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5361	1	4.5~18	3	0.765	150	600	N	Internal	PFM	Y	COT	SOT23-6
JW5361M	1	4.5~18	3	0.765	150	600	N	Internal	PFM	Y	COT	SOT23-6
JW5361F	1	4.5~18	3	0.765	150	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5361FM	1	4.5~18	3	0.765	150	600	N	Internal	FCCM	Y	COT	SOT23-6
JW5361H	1	4.5~18	3	0.765	150	1200	N	Internal	PFM	Y	COT	SOT23-6
JW5361HM	1	4.5~18	3	0.765	150	1200	N	Internal	PFM	Y	COT	SOT23-6
JW5361HF	1	4.5~18	3	0.765	150	1200	N	Internal	FCCM	Y	COT	SOT23-6
JW5361HFM	1	4.5~18	3	0.765	150	1200	N	Internal	FCCM	Y	COT	SOT23-6
JW5040*	1	3.8~18	3	0.8	120	500	N	Internal	PFM	Y	PCM	SOT563 / TSOT23-6
JW5040C*	1	4.5~16	3	0.8	100	500	N	Internal	PFM	Y	PCM	SOT23-6
JW5057C*	1	4.5~16	3	0.6	100	500	N	Internal	PFM	Y	PCM	SOT23-6
JW5093*	1	4.5~18	3	0.8	140	600	N	Internal	PFM	Y	COT	SOT563
JW5371	1	4.5~18	3	0.765	150	600	N	Internal	PFM	Y	COT	TSOT23-6
JW5371F	1	4.5~18	3	0.8	150	600	N	Internal	FCCM	Y	COT	TSOT23-6
JW5393C	1	4.5~18	3	0.8	150	600	N	Internal	PFM	Y	COT	SOT563
JW5393CF	1	4.5~18	3	0.8	150	600	N	Internal	FCCM	Y	COT	SOT563
JW5393	1	4.5~18	3	0.8	150	600	N	Internal	PFM	Y	COT	SOT563
JW5393F	1	4.5~18	3	0.8	150	600	N	Internal	FCCM	Y	COT	SOT563
JW5393H	1	4.5~18	3	0.8	150	1200	N	Internal	PFM	Y	COT	SOT563
JW5393HF	1	4.5~18	3	0.8	150	1200	N	Internal	FCCM	Y	COT	SOT563
JW5363H	1	4.5~18	3	0.6	150	1200	N	Internal	PFM	Y	COT	SOT563
JW5363HF	1	4.5~18	3	0.6	150	1200	N	Internal	FCCM	Y	COT	SOT563
JW5363F	1	4.5~18	3	0.6	150	600	N	Internal	FCCM	Y	COT	SOT563
JWH5042	1	4.5~18	3	0.8	380	187~1300	Y	Adjustable	FCCM	Y	PCM	QFN3.5*3.5-14
JW5062T*	1	4~18	4	0.765	260	600	Y	Internal	PFM	Y	COT	TSOT23-6 / TSOT23-8
JW5062TF*	1	4~18	4	0.765	260	600	Y	Internal	FCCM	Y	COT	TSOT23-6 / TSOT23-8
JW5372	1	4.5~18	4	0.765	150	600	N	Internal	PFM	Y	COT	TSOT23-6
JW5372F	1	4.5~18	4	0.765	150	600	N	Internal	FCCM	Y	COT	TSOT23-6
JW5394	1	4.5~18	4	0.8	150	600	N	Internal	PFM	Y	COT	SOT563
JW5394F	1	4.5~18	4	0.8	150	600	N	Internal	FCCM	Y	COT	SOT563
JW5364	1	4.5~18	4	0.6	150	600	N	Internal	PFM	Y	COT	SOT563
JW5364H	1	4.5~18	4	0.6	150	1130	N	Internal	PFM	Y	COT	SOT563
JW5056	1	4.5~18	5	0.76	130	560	N	Internal	PFM	Y	COT	TSOT23-6
JW5056F	1	4.5~18	5	0.76	130	560	N	Internal	FCCM	Y	COT	TSOT23-6

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Step-down Converter V_{IN} Max >10V

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW53A05	1	4.5~18	5	0.765	130	580	Y	Internal	PFM	Y	COT	ESOP8
JW53A05F	1	4.5~18	5	0.765	130	580	Y	Internal	FCCM	Y	COT	ESOP8
JW5005	1	4.5~18	5	0.6	130	500	N	Internal	PFM	Y	COT	TSOT23-6
JW5006	1	4.5~18	6	0.6	130	500	N	Internal	PFM	Y	COT	TSOT23-6
JW5066	1	4.5~18	6	0.76	130	560	N	Internal	PFM	Y	COT	TSOT23-6
JW5066F	1	4.5~18	6	0.76	130	560	N	Internal	FCCM	Y	COT	TSOT23-6
JW53A06	1	4.5~18	6	0.765	130	580	Y	Internal	PFM	Y	COT	ESOP8
JW53A06F	1	4.5~18	6	0.765	130	580	Y	Internal	FCCM	Y	COT	ESOP8
JW5048	1	4~18	8	0.6	45	500	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5049	1	4~18	10	0.6	45	500	Y	Internal	PFM	Y	COT	QFN3*3-20
JWH5046	1	4.5~17	6	0.6	380	210~1770	Y	Adjustable	FCCM	Y	PCM	QFN3.5*3.5-14
JWH5083	1	4.5~17	8	0.6	580	400/800/1200	Y	Adjustable	FCCM	Y	COT	QFN3.5*3.5-18
JWH5084	1	4.5~17	12	0.6	580	400/800/1200	Y	Adjustable	FCCM	Y	COT	QFN3.5*3.5-18
JWH5085A	1	2.7~16	12	0.6	620	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-21
JWH5084H	1	4.5~17	14	0.6	580	400/800/1200	Y	Adjustable	FCCM	Y	COT	QFN3.5*3.5-18
JWH5086A	1	2.7~16	16	0.6	550	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-21
JWH5087A	1	2.7~16	20	0.6	550	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-21
JWH5087AW	1	2.7~16	20	0.6	550	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-19
JW5017S	1	4.5~26	1.2	0.8	40	1200	N	Internal	PFM	Y	PCM	SOT23-6
JW5027	1	3.8~24	2	0.8	120	1400	N	Internal	PFM	Y	PCM	SOT23-6
JW5071	1	4.5~28	2	0.6	120	600	N	Internal	PFM	Y	PCM	SOT23-6
JW5057S*	1	4~24	3	0.6	220	500	N	Internal	PFM	Y	COT	TSOT23-6
JW5065	1	4~24	3	0.8	260	450	N	Internal	Selectable	Y	COT	TSOT23-8
JW5070	1	4.5~28	3	0.596	50	500	N	Internal	PFM	Y	PCM	SOT23-6
JW5072	1	4.5~28	2	0.6	140	500	N	Internal	PFM	Y	COT	SOT23-6
JW5173S	1	4.5~28	3	0.8	60	500	N	Adjustable	PFM	Y	COT	ESOP8
JW5069A	1	4~23	6	0.6	45	500	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5168BS	2	4~23	8	3.35V	40	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5169BS	2	4~23	6	3.35V	40	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5186A	1	4~23	6	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN3*3-20
JW5186AH	1	4~23	6	0.6	45	600	Y	Internal	PFM	Y	COT	QFN2.5*2.5-16
JW5186AU	1	4~23	6	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5186DU	1	4~23	6	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5186DH	1	4~23	6	0.6	45	600	Y	Internal	PFM	Y	COT	QFN2.5*2.5-16
JW5186CU	2	5.5~23	6	5.1	36	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW51V86AU	1	4.5~24	6	0.6	160	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW51V86AH	1	4.5~24	6	0.6	170	600	Y	Internal	PFM/FCCM	Y	COT	QFN2.5*2.5-16
JW51V86BU	2	4.5~24	6	3.35	190	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5076	1	4~24	6	0.6	120	600	Y	Internal	PFM/FCCM	Y	I2	QFN2.5*2.5-16
JW5078	1	4~24	8	0.6	120	600	Y	Internal	PFM/FCCM	Y	I2	QFN2.5*2.5-16
JW5188A	1	4~23	8	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN3*3-20

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Step-down Converter V_{IN} Max >10V

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5188AU	1	4~23	8	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5188DU	1	4~23	8	0.6	45	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5188DH	1	4~23	8	0.6	45	600	Y	Internal	PFM	Y	COT	QFN2.5*2.5-16
JW5188AH	1	4~23	8	0.6	45	600	Y	Internal	PFM	Y	COT	QFN2.5*2.5-16
JW5188CU	2	5.5~23	8	5.1	36	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW51V88AU	1	4.5~24	8	0.6	160	500	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW51V88AH	1	4.5~24	8	0.6	170	600	Y	Internal	PFM/FCCM	Y	COT	QFN2.5*2.5-16
JW51V88BU	2	4.5~24	8	3.35	190	600	Y	Internal	PFM/USM	Y	COT	QFN2.5*2.5-16
JW5138A	1	4.5~23	8	0.6	80	500	Y	Internal	PFM/USM	Y	COT	UQFN3*3-23
JW5138D	1	4.5~23	8	0.6	80	500	Y	Internal	PFM/USM	Y	COT	UQFN3*3-23
JW5138B	2	4.5~23	8	3.35	80	500	Y	Internal	PFM/USM	Y	COT	UQFN3*3-23
JW5138C	2	5.5~23	8	5.1	80	500	Y	Internal	PFM/USM	Y	COT	UQFN3*3-23
JW5068A	1	4~23	8	0.6	45	500	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5068C	2	5.5~23	8	5.1	36	600	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5079A	1	4~23	10	0.6	45	500	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5190C	1	5.5~24	11	0.6	45	600	Y	Internal	PFM/USM	Y	COT	QFN3*4-13
JW5079C	2	5.5~23	10	5.1	36	600	Y	Internal	PFM	Y	COT	QFN3*3-20
JW5075A	1	4~30	5	1	33	200~1100	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JW5077	1	4~30	6	1	33	200~1100	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JW5110	1	4.5~46	0.2	0.8	26	-	Y	Internal	PFM	Y	HYS	SOT23-6 / DFN2*3-8
JW5018Y	1	4.5~42	0.6	0.8	85	2100	N	Internal	PFM	Y	PCM	SOT23-6
JW5018X	1	4.5~42	0.6	0.8	85	1100	N	Internal	PFM	Y	PCM	SOT23-6
JW5018YF	1	4.5~42	0.6	0.8	85	2100	N	Internal	FCCM	Y	PCM	SOT23-6
JW5018XF	1	4.5~42	0.6	0.8	85	1100	N	Internal	FCCM	Y	PCM	SOT23-6
JW5100A	1	4.5~42	0.6	0.8	85	700	N	Internal	PFM	Y	PCM	SOT23-6
JW5100B	1	4.5~42	0.6	0.8	85	2100	N	Internal	PFM	Y	PCM	SOT23-6
JW5026*	1	4.7~40	1	0.8	40	1100	N	Internal	FCCM	Y	PCM	SOT23-6
JW5101	1	4.5~40	1	0.8	80	700	N	Internal	PFM	Y	PCM	SOT23-6
JW5015A	1	3.6~40	2	0.8	65	440	N	Internal	PFM	Y	PCM	ESOP8
JW5112	1	4.5~36	2	0.6	140	500	N	Internal	PFM	Y	COT	TSOT23-6
JW5116F	1	4.7~40	3	0.8	65	100~700	N	Internal	PFM	N	PCM	ESOP8/ SOP8
JWH5102AS	1	4~36	2	0.8	45	410	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5102BS	1	4~36	2	0.8	45	1000	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5102CS	1	4~36	2	0.8	45	2100	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5102CSF	1	4~36	2	0.8	45	2100	Y	Internal	FCCM	Y	PCM	QFN3*2-12
JWH5103AS	1	4~36	3	0.8	45	410	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5103BS	1	4~36	3	0.8	45	1000	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5103CS	1	4~36	3	0.8	45	2100	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWH5103CSF	1	4~36	3	0.8	45	2100	Y	Internal	FCCM	Y	PCM	QFN3*2-12
JWH5155	1	4~36	5	1	33	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWH5156	1	4~36	6	1	33	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWH5157	1	4~36	7	1	33	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JW5117S	1	4.5~45	5	0.75	180	100~2000	N	Adjustable	PFM	N	PCM	ESOP8

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Step-down Converter V_{IN} Max >10V

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JW5117	1	4.5~45	5	0.8	180	100~2000	Y	Adjustable	PFM	N	PCM	DFN4*4-10
JW5117C	1	4.5~45	5	0.8	180	100~2000	N	Internal	PFM	N	PCM	ESOP8
JW5126	1	4.5~65	0.2	0.8	26	-	Y	Internal	PFM	Y	HYS	SOT23-6 / DFN2*3-8
JW9520	1	4.5~65	1	0.8	130	100~2000	Y	Internal	PFM	N	PCM	ESOP8
JW9521C	1	4.5~60	1.5	0.8	130	100~2000	Y	Internal	PFM	N	PCM	ESOP8
JW5121	1	4.5~65	2	0.8	130	100~2000	Y	Internal	PFM	N	PCM	ESOP8
JWH5123	1	4.5~65	3.5	0.8	180	100~2000	Y	Adjustable	PFM	N	PCM	DFN4*4-10
JWH5123CH	1	4.8~60	3.5	0.8	85	100~2000	N	Internal	PFM	N	PCM	ESOP8
JWH5123S	1	4.5~65	3.5	0.75	180	100~2000	N	Adjustable	PFM	N	PCM	ESOP8
JWH5123P	1	4.5~65	3.5	0.75	180	100~2000	Y	Internal	PFM	N	PCM	ESOP8
JWH5125	1	4.8~65	5	0.8	180	100~2000	Y	Adjustable	PFM	N	PCM	DFN4*4-10
JWH5125S	1	4.5~65	5	0.75	180	100~2000	N	Adjustable	PFM	N	PCM	ESOP8
JWH5125C	1	4.5~65	5	0.8	180	100~2000	N	Internal	PFM	N	PCM	ESOP8
JWH5125CH	1	4.8~60	5	0.8	85	100~2000	N	Internal	PFM	N	PCM	ESOP8
JWH5140	1	6~100	0.6	1.225	100	100~1000	N	Internal	PFM	Y	COT	DFN4*4-8 / ESOP8
JWH5140F	1	6~100	0.6	1.225	100	100~1000	N	Internal	FCCM	Y	COT	DFN4*4-8 / ESOP8
JWH5141	1	6~100	1	1.225	100	100~1000	N	Internal	PFM	Y	COT	ESOP8
JWH5141F	1	6~100	1	1.225	100	100~1000	N	Internal	FCCM	Y	COT	ESOP8
JW5142	1	6~100	1.5/2.5	1.225	20	300	N	Internal	PFM	N	COT	ESOP8
JW5142P	1	6~100	1.5/2.5	1.225	20	100~600	Y	Internal	PFM	N	COT	ESOP8
JW5143	1	6~100	1.5/3.5	1.225	20	300	N	Internal	PFM	N	COT	ESOP8
JW5143P	1	6~100	1.5/3.5	1.225	20	100~600	Y	Internal	PFM	N	COT	ESOP8

Step-up Converter

P/N	Regulated Outputs	V_{IN} (V)	V_{OUT} (V)	V_{SUB} (V)	Max. Switch Current (A)	I_Q (uA)	V_{FB} (V)	F_{SW} (kHz)	Type	Package
JW5522	1	0.7~5.5	2.2~5.5	-	3.6	35	0.6	1000	Sync. Converter	SOT563
JW5702	1	0.9~4.5	1.8~5.5	-	0.7	0.4	1	no fixed	Sync. Converter	CSP1.23*0.88-6/DFN2*2-6/SOT563
JW5520S	1	1.2~5	2.5~5.5	-	9	30	1.2	600	Sync. Converter	QFN2*2-14
JW5701A	2	1.2~5.5	3.3	3(LDO)	0.5	0.7	-	no fixed	Sync. Converter+LDO	DFN1.5*1.5-6
JW5701B	2	1.2~5.5	3.3	2.8(LDO)	0.5	0.7	-	no fixed	Sync. Converter+LDO	DFN1.5*1.5-6
JW5701E	2	1.2~5.5	3	ON(Load Switch)	0.5	0.7	-	no fixed	Sync. Converter +Load Switch	DFN1.5*1.5-6
JW5701F	2	1.2~5.5	3.3	ON(Load Switch)	0.5	0.7	-	no fixed	Sync. Converter +Load Switch	DFN1.5*1.5-6
JW5701G	2	1.2~5.5	5	ON(Load Switch)	0.5	0.7	-	no fixed	Sync. Converter +Load Switch	DFN1.5*1.5-6
JW5703C	2	1.2~5.5	3.3	1.8(LDO)	0.5	0.7	-	no fixed	Sync. Converter+LDO	DFN1.5*1.5-6
JW5520SA	1	1.2~5.5	2.5~5.5	-	9	30	1.2	600	Sync. Converter	QFN2*2-14
JW5523	1	1.2~5	2.5~5.5	-	9	27	1.23	600	Sync. Converter	UDFN2*2-7
JW5513	1	2.6~20	up to 20	-	15	70	1	300~2000	Sync. Converter	QFN3*3-20
JWH5513	1	2.8~20	up to 20	-	15	80	1	400~2000	Sync. Converter	QFN3*3-20
JW5518	1	2~20	up to 20	-	20	85	1	400	Sync. Converter	QFN3*4-13
JW5535	1	3~18	up to 38	-	2	248	1.23	1200	Non-Sync. Converter	DFN2*2-6

Buck-Boost

P/N	V_{IN} (V)	V_{OUT} (V)	I_Q (uA)	F_{SW} (kHz)	V_{FB} (V)	Current Limit (A)	Interface	Integrated FET	Package
JW3651	3~21	0.9~20	50	450	0.9	3	No	Yes	QFN3*4-15
JW3658	3.3~28	1~20	380	200~1000	0.2~1	6	I2C	Yes	QFN4*5-21
JW3658C	3.3~28	1~20	380	200~1000	0.2~1	6	I2C	Yes	QFN4*5-21

Controller

P/N	Topology	V_{IN} (V)	V_{OUT} (V)	V_{FB}(V)	F_{SW} (kHz)	I_Q (uA)	Features	Package
JWH5583	Boost	3-50	External	1.275	100~1000	1.5	Current Mode PWM Controller	MSOP10
JW3760	Buck-Boost	5~60	1.2~60	1.2	180~400	3500	60V 4-Switch Buck-boost Controller	QFN5*5-32
JW3701	Buck-Boost	3~36	2.4~36	1.2	300~500	30	36V 4-Switch Buck-boost Controller	QFN4*4-24
JW3702	Buck-Boost	3~24	2.4~24	1.2	300~500	30	24V 4-Switch Buck-boost Controller	QFN4*4-32
JW3703	Buck-Boost	3~36	2.4~36	1.2	300~500	30	36V 4-Switch Buck-boost Controller	QFN4*4-32
JWH6344A	Buck	6~65	0.8~Dmax·VIN	0.8	100~1000	600	Light Load Selectable(PFM/FCC)	QFN3.5*4.5-20
JW6340	Buck	6~120	0.8~60	0.8	100~500	450	Synchronous Buck Controller with 120V Withstanding Voltage	HTSSOP16
JWH6346A	Buck	6~100	0.8~Dmax·VIN	0.8	100~1000	600	Light Load Selectable(PFM/FCC) MOSFET Gate Driver Voltage Selectable(7.5V/10V)	QFN3.5*4.5-20

Isolated DC/DC

P/N	V_{IN} (V)	Topology	Max Power(W)	RDSON (Ω)	F_{MAX} (kHz)	Soft Sart	Features	Package
JW3510	3~42	Flyback	6	0.5	430	Internal	Opto-Free, EN control	SOT23-5
JWH3511	3.5~48	Flyback	6	0.45	400	Internal	Opto-Free, EN control	SOT23-5
JWH3511S	3.5~48	Flyback	6	0.45	400	Internal	Opto-Free, EN control	SOT23-5
JWH3511H	3.5~48	Flyback	6	0.45	620	Internal	Opto-Free, EN control	SOT23-5
JWH3511HS	3.5~48	Flyback	6	0.45	620	Internal	Opto-Free, EN control	SOT23-5
JWH3512	3.5~48	Flyback	6	0.45	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3512S	3.5~48	Flyback	6	0.45	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3512H	3.5~48	Flyback	6	0.45	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3512HS	3.5~48	Flyback	6	0.45	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3513	3.5~72	Flyback	10	0.44	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3513S	3.5~72	Flyback	10	0.44	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3513H	3.5~72	Flyback	10	0.44	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3513HS	3.5~72	Flyback	10	0.44	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3514	4.5~72	Flyback	24	0.43	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3514S	4.5~72	Flyback	24	0.43	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3514H	4.5~72	Flyback	24	0.43	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8

Isolated DC/DC

P/N	V_{IN} (V)	Topology	Max Power(W)	RDSON (Ω)	F_{MAX} (kHz)	Soft Sart	Features	Package
JWH3514HS	4.5~72	Flyback	24	0.43	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWH3515	17~75	Flyback	6	2.1	1MHz	Internal	Internal Error Amplifier, Integrated 200V Power Switch Circuit,Startup Circuit	QFN4*4-8 /SOP8/ MSOP8
JWH3516	17~75	Flyback	20	0.7	1.5MHz	Internal	Internal Error Amplifier, Integrated 200V Power Switch Circuit,Startup Circuit	DFN5*6-8
JW3520	3~6	Push-Pull	1	0.6	400	Internal	Push-Pull Transformer Driver	SOT23-5/6
JWH5581	9~30	Boost, Flyback	External	External	500	Programmable	Current mode PWM controller	SOIC8
JWH3530	18~75	Active Clamp Forward	300	External	External Setting	Programmable	Support Voltage Mode, Current Mode	QFN4*4-24

Power Module

P/N	Function	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Isolated	Package
JWM9101EC	Step-down	2.9~6	1	0.6	850	2000	Y	Internal	FCCM	N	LGA2.5*2.5*1.1
JWM9102	Step-down	2.9~6	2	0.6	850	2000	Y	Internal	FCCM	N	QFN2.5*3.5*1.6
JWM9102EC	Step-down	2.9~6	2	0.6	850	2000	Y	Internal	FCCM	N	LGA2.5*2.5*1.1
JWM9103A	Step-down	2.9~6	3	0.6	850	2000	Y	Internal	FCCM	N	QFN2.5*3.5*1.6
JWM9103H	Step-down	2.9~6	3	0.6	850	2000	Y	Internal	FCCM	N	LGA2.5*2.5*1.1
JWM9123EC	Step-down	2.9~6	3	0.6	850	2000	Y	Internal	FCCM	N	LGA2*2.5*1.1
JWM9103EC	Step-down	2.9~6	3	0.6	850	2000	Y	Internal	FCCM	N	LGA2.5*2.5*1.1
JWM9106EC	Step-down	2.9~6	6	0.6	300	1200	Y	External	FCCM	N	LGA3*3*1.48
JWM9220	Step-down	3~14	20	0.6	3700	1000	Y	External	FCCM	N	LGA11*11*5-20
JWM9203CL	Step-down	4.5~18	3	0.8	150	1200	N	Internal	PFM	N	LGA3*2.8*1.48
JWM9203FCL	Step-down	4.5~18	3	0.8	150	1200	N	Internal	FCCM	N	LGA3*2.8*1.48
JWM9215AEC	Step-down	4~16	15	0.6	550	1000	Y	External	FCCM	N	LGA5*5*2.5-32

PMU

P/N	Supply Voltage (V)	Regulated Output (#)	Application	Package
JWH7560	8~150	3	Solar inverter, PV optimizer, Industry system	WQFN5*5-24L
JWH7561	8~100	3	Solar inverter, PV optimizer, Industry system	WQFN5*5-24L
JWH60110	4.25~5.5	5(3buck+2LDO)	DDR5 SODIMM for Notebook and Desktop Systems DDR5 UDIMM for Desktop Systems	QFN3*4-28
JW9661	4.25~5.5	5(3buck+2LDO)	DDR5 SODIMM for Notebook and Desktop Systems DDR5 UDIMM for Desktop Systems	QFN3*4-28

LNB Power Supply

P/N	Protocal	V_{IN} (V)	I_{OUT} (A)	V_{OUT} (V)	Programmable Current Limit	22kHz Tone Signal	Cable Compensation	Package
JW4008	DiSEqC 1.x	7~14	>0.5	14.2/19.4	-	External	N	ESOP-8
JW4008B	DiSEqC 1.x	7~14	>0.5	13.5/18	-	External	N	ESOP-8

LED Backlight Driver

P/N	Channels	Control Interface	Min Dimming Duty (%)	V_{IN} (V)	$V_{OUT\ (MAX)}$(V)	F_{SW} (kHz)	Max. Switch Current (A)	Package
JW1164	6	PWM	0.5	2.7~24	38	1000	2.8	WQFN3*3-16

LCD Power-Level Shift

P/N	VGH Input Range(V)	VGL Input Range(V)	Channels	Discharge channel	Tcon Input Mode	Over Current Protect	Charge Sharing	Package
JW1332A	17~42	-3~18	2 STV, 6 CLK	2	6 in 6out	Y	Y	WQFN4*4-28
JW1332B	17~42	-3~18	2 STV, 6 CLK, 2 LC	0	6 in 6out 2 in 6 out	Y	Y	WQFN4*4-32
JW1332C	17~42	-3~18	2 STV, 6 CLK, 2 LC	1	6 in 6out 2 in 6 out	Y	Y	WQFN4*4-32

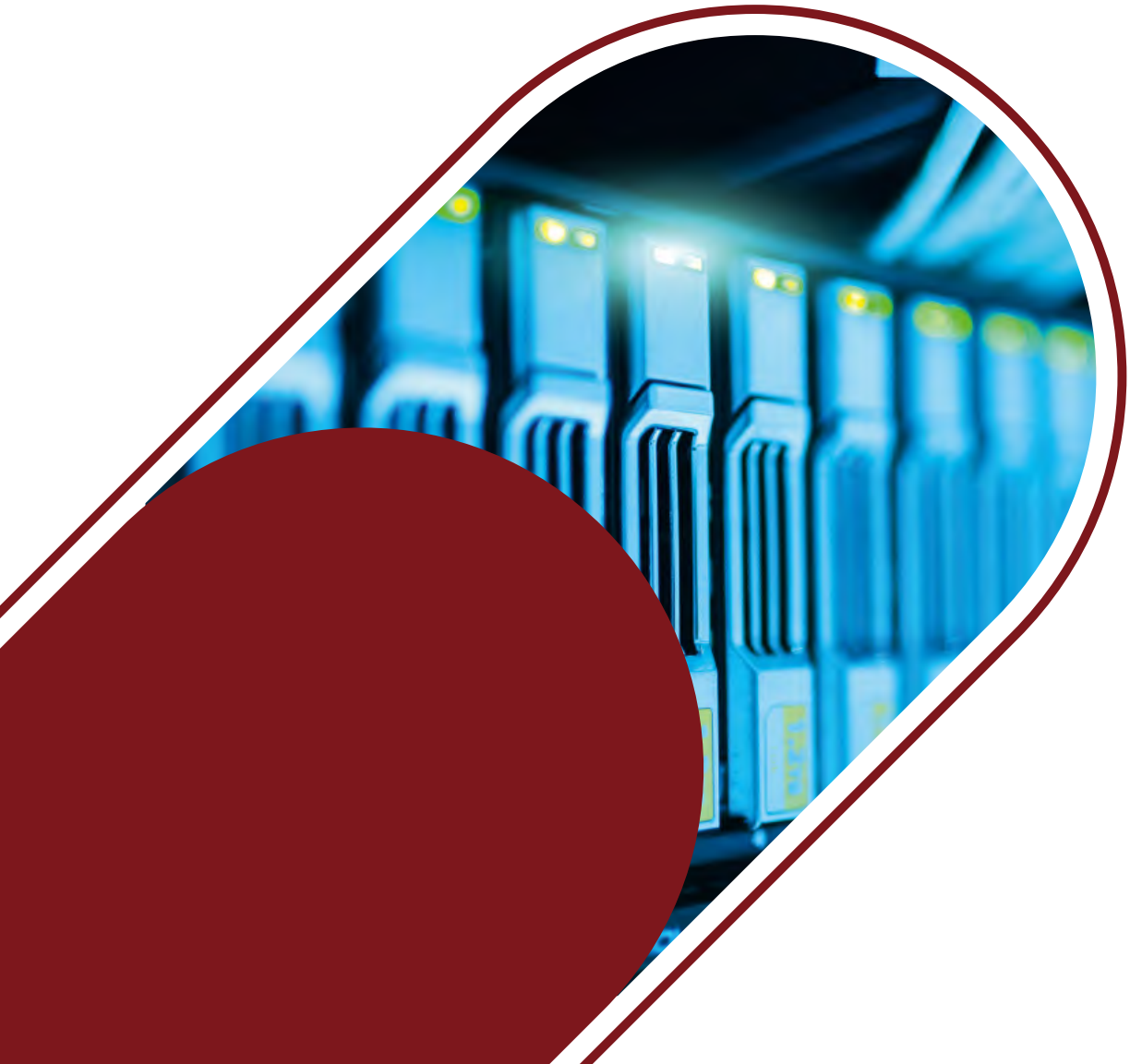
LCD Power-PMIC

P/N	Input Range(V)	AVDD	AVEE	VGH	VGL	VCOM	XAO	Others	Package
JW1360	2.5~5.5	+ 4~6V 80mA/220mA	- 4~6V 80mA/220mA	NC	NC	NC	NC	NC	WLCSP 1.40*2.03 -15L
JW1386	2.5~5.5	Boost converter 20V, 3A, NMOS	NC	Charge Pump	Charge Pump	1 ch	Open Drain	Gate Pulse Modulation	WQFN4*4 -24

02

Vcore Power

JoulWatt has complete Vcore Power solutions including Multi-phase controller and Power Stage that can provide high current to various xPU.



JWH6377

Dual-Loop, Multi-Phase Controller with PMBus Interface

Key Features

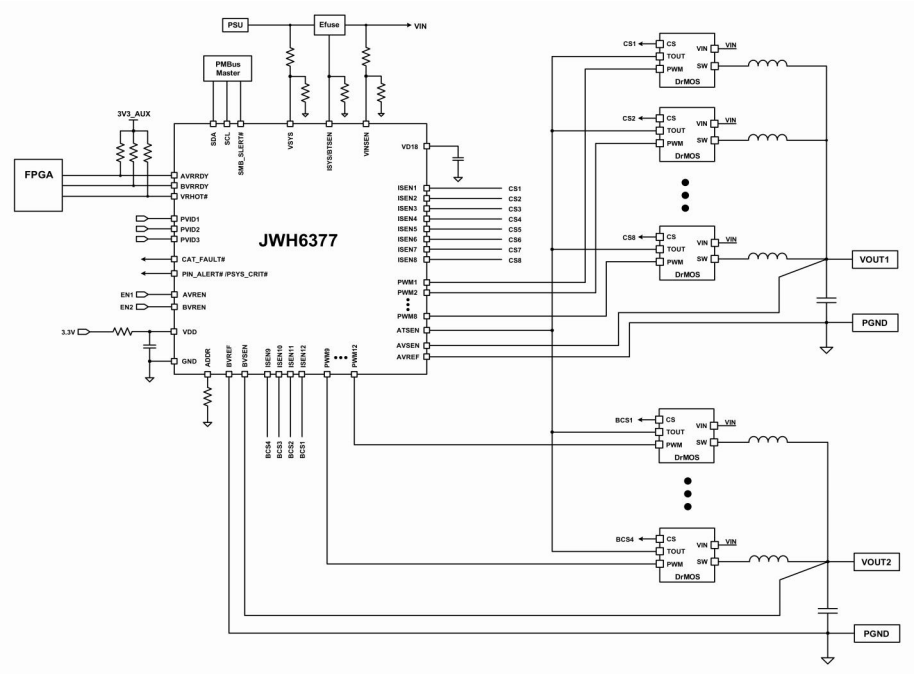
- Up to 12-phase, Dual-output Controller
- PMBus/I2C and Compliant
- Built-In NVM to Store Custom Configurations
- Compatible with DrMOS by Multiple Vendors
- Programmable Loop Compensation
- Flexible Phase Assignment for Dual Rails
- Phase-to-phase Active Current Balancing with Configurable Offset for Thermal Balance
- Vin UVLO/OVP, Vout UVP/OVP/OCP, OTP with Options of No Action, Latch, Retry or Hiccup
- PMBus System Interface for Telemetry of Voltage, Current, Power, Temperature and Fault Conditions

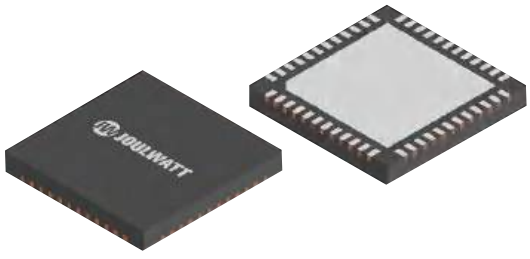
Benefits

- Fast Transient Response
- Configurable Load Line with High Precision
- Multiple Telemetry and Reporting Mechanism
- Flexible Phase Assignment for Dual Rails
- Fault Automatic recording to the NVM

Application Fields

- Telecom and
- Networking Systems
- XPU core power supply





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Multi-phase Controller

P/N	Rail Number	Phase Number	Min Supply Voltage(V)	Max Input Voltage(V)	Min Fsw(kHz)	Max Fsw(kHz)	Interface	Pacakge
JWH6396	2	6	3.15	3.6	10	1000	IMVP9.1/9	QFN6*6-48
JWH6390	2	9	3.15	3.6	10	1000	IMVP9.1/9	QFN6*6-48
JWH6374	2	8	3.15	3.6	10	1000	PMBus/I2C	QFN5*5-40
JWH6375	2	8	3.15	3.6	10	1000	VR14/13.HC/13 PMBus/I2C	QFN5*5-40
JWH6377	2	12	3.15	3.6	10	1000	PMBus/I2C	QFN6*6-48
JWH6376	2	12	3.15	3.6	10	1000	VR14/13.HC/13 AVSBus/PMBus/I2C	QFN6*6-48
JWH63551	2	5	3.15	3.6	10	1000	VR13.HC/VR13 AVSBus/PMBus/I2C	QFN5*5-40

DrMOS

P/N	Min Input Voltage(V)	Max Input Voltage(V)	Typical Current Limit(A)	Min Fsw(kHz)	Max Fsw(kHz)	PWM Logic Voltage(V)	Package
JWH7030	4.5	22	60	100	1500	3.3	QFN3*5-21
JWH7060	3	16	75	100	1000	3.3	LGA5*6-41
JWH7067	3	16	75	100	1500	3.3	TLGA5*6-41
JWH7069	3	16	110	300	1500	3.3	TLGA5*6-41
JWH7079	3	16	115	300	3000	3.3	TLGA4*6-34
JWH7079D	3	16	115	300	3000	3.3	TLGA4*6-34 (Thermal enhanced)

03

AC/DC Power supply

JoulWatt offers rich high-performance products to solve the control of multi-type topologies on the primary side and meet the requirements of synchronous rectification on the secondary side. From traditional silicon power control solutions to corresponding solutions for third-generation semiconductors, JoulWatt helps engineers to develop power supply products with high efficiency, high power density andhigh performance.

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AC/DC Synchronous Rectifier

P/N	Breakdown Voltage (V)	R_{DSON} (mΩ)	V_{OUT} (V)	Output Current (A)	Supported Operation Mode	Package
JW7700A8	40	15	5	2.4	CCM, CrCM, DCM, QR	SOP8
JW7703D8	40	6.3	5	3	CCM, CrCM, DCM, QR	SOP8
JW77284C	45	16	5	3	CCM, CrCM, DCM, QR	ESOP8
JW77284CS	45	16	5	3	CCM, CrCM, DCM, QR	SOP8
JW77284D	45	12	5	3	CCM, CrCM, DCM, QR	ESOP8
JW77284E	45	6.3	5	4	CCM, CrCM, DCM, QR	ESOP8
JW7728H6B	60	13	3~12	3	CCM, CrCM, DCM, QR	ESOP8
JW7728H6C	60	11	3~12	3	CCM, CrCM, DCM, QR	ESOP8/SOP8
JW7728H6D	60	8.5	3~12	3	CCM, CrCM, DCM, QR	ESOP8
JW7728H6BS	65	13	3~12	3	CCM, CrCM, DCM, QR	SOP8
JW7721AH	100	10	3~20	3	CCM, CrCM, DCM, QR	SOP8
JW7726AC	100	15	3~20	2.4	CCM, CrCM, DCM, QR	SOP8
JW7726AD	100	10	3~20	3	CCM, CrCM, DCM, QR	SOP8
JW7726HAD	100	10	3~20	3	CCM, CrCM, DCM, QR	PDFN5*6
JW7726HAEC	100	7.8	3~20	3.25	CCM, CrCM, DCM, QR	PDFN5*6
JW7726HAE	100	6	3~20	4	CCM, CrCM, DCM, QR	PDFN5*6
JW7726S	140	External	3~48	-	CCM, CrCM, DCM, QR,ACF	SOT23-6
JW7726T	140	External	3~48	-	CCM, CrCM, DCM, QR,ACF,AHB	SOT23-6
JW7726BL	150	External	3~20	-	CCM, CrCM, DCM, QR,ACF	SOT23-6
JW7726BH	150	External	3~20	-	High Frequency; CCM, CrCM, DCM, QR,ACF	SOT23-6
JW7726H	150	External	3~20	-	CCM, CrCM, DCM, QR,ACF,AHB	SOT23-6
JW7730	150	External	4.33~35	-	CCM, CrCM, DCM Single Souce Sensing	SOP8
JW7730A	150	External	4.33~35	-	CCM, CrCM, DCM Dual Sources Sensing	SOP8

AC/DC Flyback PWM IC

P/N	Max Power (W)	PSR /SSR	Type	MOSFET Rating (V)	R_{DSON} (Ω)	F_{MAX} (kHz)	Standby Power(mW)	Features	Package
JW1518MA	10	SSR	Fixed Frequency	1000, Si	10(typ)	60	<75	-	DIP7
JW1510PA	18	SSR	Fixed Frequency	1200, Si	6(typ)	65	<75	-	DIP7
JW1518HCD	20	SSR	Fixed Frequency	800, Si	3.95(max)	100	<75	-	DIP7
JW1518JC	20	SSR	Fixed Frequency	800, Si	3.95(max)	65	<75	-	DIP7
JW15197A	20W(High line input)	SSR	QR	700, GaN	2.7(typ)	105	<75	-	HSOP-7
JW15197BS	20	SSR	QR	700, GaN	1.5(typ)	105	<75	-	HSOP-7
JW15197B	25	SSR	QR	700, GaN	1.0(typ)	105	<75	-	HSOP-7
JW15197C	33	SSR	QR	700, GaN	0.72(typ)	105	<75	-	HSOP-7
JW15197D	40	SSR	QR	700, GaN	0.48(typ)	105	<75	-	HSOP-7
JW15198A	20	SSR	QR	700, GaN	1.6(typ)	108	<75	-	HSOP-7
JW15158B	20	SSR	QR	700, GaN	1.0(typ)	110	<75	-	HSOP-7

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AC/DC Flyback PWM IC

P/N	Max Power (W)	PSR /SSR	Type	MOSFET Rating (V)	R_{DSON} (Ω)	F_{MAX} (kHz)	Standby Power(mW)	Features	Package
JWH1502F	32	SSR	QR	800, Si	1.2(typ)	125	<75	-	SOP12
JW15158D	33	SSR	QR	700, GaN	0.47(typ)	110	<75	-	HSOP-7
JW15197C	33	SSR	QR	700, GaN	0.62(typ)	108	<75	-	HSOP-7
JW15156D	33	SSR	QR	700, GaN	0.47(typ)	120	<75	-	PDFN5*6
JW15156E	40	SSR	QR	700, GaN	0.365(typ)	120	<75	-	PDFN5*6
JW15156F	50	SSR	QR	700, GaN	0.27(typ)	120	<75	-	PDFN5*6
JW15158AS	20W(High line input)	SSR	QR	700, GaN	1.6(typ)	110	<75	-	HSOP-7
JW15158I	100W (High line input)	SSR	QR	700, GaN	0.365(typ)	170	<75	-	ESOP10
JW15158K	160W(High line input)	SSR	QR	700, GaN	0.165(typ)	170	<75	-	ESOP10
JW1519AP	100	SSR	QR (with peak load)	External	External	85	<75	-	SOT23-6
JW1519B	100	SSR	QR	External	External	100	<75	-	SOT23-6
JW1556ZH	120	SSR	AHB	500V,MOS	0.52(typ)	External Setting	<75	Protection: Auto-recovery	QFN6*8-31
JW1556ZJ	140	SSR	AHB	650V,MOS	0.32(typ)	External Setting	<75	Protection: Auto-recovery	QFN6*8-31
JW1556ZJC	140	SSR	AHB	650V,SIC MOS	0.55(typ)	External Setting	<75	Protection: Auto-recovery	QFN6*8-31
JW1556ZLC	240	SSR	AHB	650V,SIC MOS	0.32(typ)	External Setting	<75	Protection: Auto-recovery	QFN6*8-31
JW1515HA	150	SSR	QR	External GaN	External GaN	170	<75	-	SSOP10
JW1516	150	SSR	QR	External	External	130	<75	-	SSOP10
JW1516A	150	SSR	QR (without X CAP Discharge)	External	External	130	<75	-	SSOP10
JWH1503	150	SSR	QR	External	External	-	<75	-	SOP8
JW1550	200	SSR	ACF	External	External	External Setting	<75	-	QFN4*4-20
JW1556B	300	SSR	AHB	External	External	External Setting	<75	Protection: Latch	QFN4*4-20
JW1556C	300	SSR	AHB	External	External	External Setting	<75	Protection: Auto-recovery	QFN4*4-20
JW1520AH	12	PSR	QR	650, Si	4.8(max)	85	<75	CC/CV:±5%	SOP8
JW1520D-C266	18	PSR	QR	670, Si	2.5(typ)	85	<75	CC/CV:±5%	SOP8
JW1520JD	18	PSR	QR	850,Si	2.5(typ)	85	<75	CC/CV:±5%	SOP8
JW1520LE	24	PSR	QR	650, Si	1.8(max)	85	<75	CC/CV:±5%	ESOP-6
JW1520LF	24	PSR	QR	670, Si	1.3(max)	85	<75	CC/CV:±5%	ESOP-6
JW1520LG	30	PSR	QR	650, Si	1(max)	85	<75	CC/CV:±5%	ESOP-6
JW1520LH	36	PSR	QR	670, Si	0.62(max)	85	<75	CC/CV:±5%	ESOP-6

AC/DC Special IC

P/N	Device	Breakdown Voltage(V)	Source Current @ Vcc=10V	Function	Vcc Voltage(V)	Package
JW7921	N-JFET	600	4mA	0.5S Shut-down	27	SOT23-3
JW7920	N-JFET	600	4mA	High Efficiency Charging	14.5	SOT23-3

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Single Live Line IC

P/N	Breakdown Voltage(V)	R_{DSON} (Ω)	Maximum Power(W)	I_Q (uA) max	V_{OUT} (V)	Package
JW1539A	25	0.008	800	40	12	TO252-2
JW1539O	25	External	2000	40	12	SOP8

GaN Power Transistor

P/N	Breakdown Voltage(V)	R_{DSON} (Ω)	Maximum Power(W)	I_Q (uA) max	V_{OUT} (V)	Package
JWD720D70	700	0.72(typ)	100	-	-	SOP8
JWD480D70	700	0.48(typ)	120	-	-	SOP8
JWD320D70	700	0.32(typ)	140	-	-	SOP8
JWD240D70	700	0.24(typ)	180	-	-	SOP8
JWD180D70	700	0.18(typ)	240	-	-	SOP8

PFC Constant Voltage Controllers and Regulators

P/N	HV-JFET	R_{DSON} (Ω)	Breakdown Voltage(V)	Power (175-264Vac)	Power (90-264Vac)	COMP	2nD OVP	Operation Mode	Package
JW1571	N	External	External	400W	300W	Internal	Y	CRM+DCM	SOP8
JW1572	N	External	External	400W	300W	External	Y	CRM+DCM	SOP8
JW1572KG	N	0.165	700	400V/750mA	400V/350mA	Internal	Y	CRM+DCM	ESOP10
JW1572LG	N	0.101	700	400V/800mA	400V/400mA	Internal	Y	CRM+DCM	ESOP10
JW1962O	N	External	External	300W	250W	Internal	Y	CRM+DCM	SOP8
JW1962H	Y	External	External	300W	250W	Internal	Y	CRM+DCM	SOP8
JW1962G	N	External	External	300W	250W	Internal	Y	CRM+DCM	SOP8
JW1962CG	Y	0.62	700	400V/240mA	400V/120mA	Internal	N	CRM+DCM	ESOP7
JW1962DG	N	0.47	700	400V/300mA	400V/150mA	Internal	N	CRM+DCM	ESOP7
JW1962EG	N	0.365	700	400V/350mA	400V/175mA	Internal	N	CRM+DCM	ESOP7
JW1962FG	N	0.27	700	400V/435mA	400V/210mA	Internal	N	CRM+DCM	ESOP7
JW1962GG	N	0.165	700	400V/450mA	400V/225mA	Internal	N	CRM+DCM	ESOP7
JW1962IG	N	0.35	700	400V/360mA	400V/180mA	Internal	Y	CRM+DCM	ESOP10
JW1962JG	N	0.27	700	400V/480mA	400V/240mA	Internal	Y	CRM+DCM	ESOP10
JW1962KG	N	0.165	700	400V/750mA	400V/350mA	Internal	Y	CRM+DCM	ESOP10
JW19629FC	N	0.32	650	400V/500mA	400V/250mA	Internal	Y	CRM+DCM	ESOP6
JW1964B	Y	5.5	500	420V90mA	420V40mA	Internal	N	CRM+DCM	SOP8
JW1964C	Y	2.8	500	420V120mA	420V60mA	Internal	N	CRM+DCM	SOP8
JW1964C1	Y	2.8	500	420V120mA	420V60mA	Internal	N	CRM+DCM	SOP8
JW1964D	Y	2	500	420V160mA	420V80mA	Internal	N	CRM+DCM	SOP8
JW1964E	Y	1.5	500	420V200mA	420V100mA	Internal	N	CRM+DCM	SOP8

JOULWATT

Offline Buck Regulator

P/N	Breadkdwon Voltage (V)	R_{DSON} (Ω)	I_{OUT} (mA)	V_{OUT} (V)	Frequency (kHz)	Standby Power (mW)	Package
JW1530	700	15	200	5	30	<30	SOT23-3
JW1532S5	500	26	150	5	40	<30	SOP7
JWB1532N5	650	30	150	5	40	<30	SOP8
JW1532N5	650	30	150	5	40	<30	SOP8
JW153255	650	25	300	5	40	<30	SOP7
JW1532M5	650	25	300	5	40	<30	SOP8
JW1532A5	650	10	450	5	40	<30	SOP8
JW1532B5	650	9	550	5	40	<30	SOP8
JW1531O	External	External	2000	3~150	-	<150	SOP8
JW1531C	500	3	800	3~150	-	<75	SOP7
JW1531B	500	5	600	3~150	-	<75	SOP7
JW1531M	500	15	250	3~150	-	<50	SOP7
JWB1536NC	500	20	200	3.3	30	<30	ASOP7
JWB1536AC	500	17	300(450mA pulse)	3.3	30	<30	ASOP7
JW1536NC	500	20	200	3.3	30	<30	SOP7
JW1536AC	500	14	450	3.3	30	<30	SOP7
JW1532A	650	13	300	12/18	65	<30	SOP8
JW1532AL	500	10	300(600mA pulse)	12/18	65	<30	SOP8
JW1532B	650	5	450	12/18	65	<30	SOP8
JW1532BL	500	5	450(900mA pulse)	12/18	65	<30	SOP8
JW15326A	650	13	300	12	65	<30	SOP8
JW15326B	650	5	450	12	65	<30	SOP8
JW15327A	650	13	300	18	65	<30	SOP8
JW15327B	650	5	450	18	65	<30	SOP8
JW15328A	650	13	400	12	65	<30	DIP7
JW15328B	650	5	550	12	65	<30	DIP7
JW15328D	650	2	650	12	65	<30	DIP7
JW15325A	650	13	300	12/15	65	<30	SOP8
JW15325B	650	5	500	12/15	65	<30	SOP8
JW153258B	650	5	550	15	65	<30	DIP7
JW15329A	650	13	350	18	65	<30	DIP7
JW15329B	650	5	500	18	65	<30	DIP7
JW15329D	650	2	600	18	65	<30	DIP7
JW1538NC	650	22	150	5/12/18/<25	30	<5	SOP7
JW1538B	650	5	450	5/12/18/<25	65	<5	SOP7
JW15385B	650	5	600	5/12/18/<25	30	<5	SOP7

Offline Buck Regulator BV<200V

P/N	Breadkdwon Voltage (V)	R_{DSON} (Ω)	I_{OUT} (mA)	V_{OUT} (V)	Frequency (kHz)	Standby Power (mW)	Package
JW1532Y	150	0.5	500	15	65	<30	SOP8

Offline Linear Regulator

P/N	Breadkdwon Voltage (V)	R_{DSON} (Ω)	I_{OUT} (mA)	V_{OUT} (V)	Standby Power (mW)	Features	Package
JW1581A	650	10	50	5/3.3	<30	Inductor-less	SOP8
JW15818A	650	10	60	5/3.3	<30	Inductor-less	DIP8
JW15816A	650	10	60	5/3.3	<30	Inductor-less	ESOP6
JW1581C	650	10	40	12/5	<30	Inductor-less and 12V Relay Driver	SOP8

04

Battery Management System

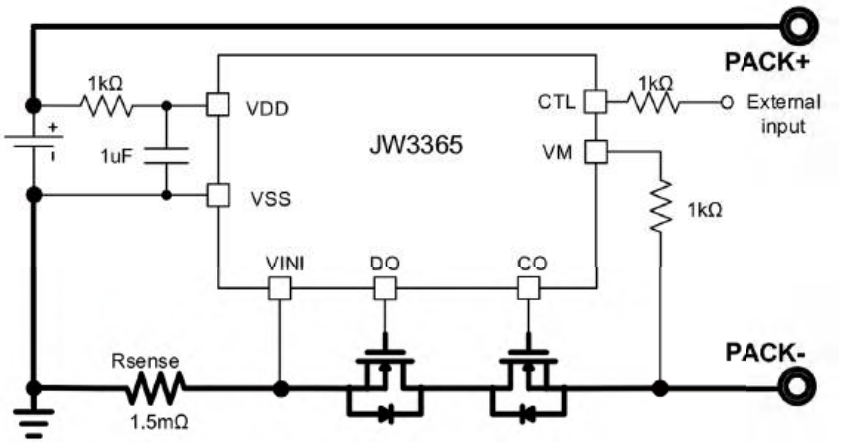
JoulWatt offers highly integrated, high-precision, and full-featuredbattery management products including charger ICs, battery protectors, battery monitor. JoulWatt assists engineers in completing peripheral simplification, safety, and reliability design solutions in a short period of time.

JW3365

1 Cell Protector with CTL Pin

Key Features

- CTL Pin: Control Pin for Under Voltage 1/Under Voltage 2/Power-down mode
- Over Voltage Protection Accuracy@±15mV
- Under Voltage Protection Accuracy@±40mV
- Charge/Discharge Over-current Protection Accuracy@±1mV
- 2nd Discharge Over-current Protection Accuracy@±2mV
- Load Short-circuit Protection Accuracy@±4mV
- Low Current Consumption (TA=25°C)
  - Normal Mode: 3.4μA@Max
  - Power-down Mode: 50nA@Max
- Package: X2DFN1.57*1.9-6L (with Exposed Pad)



Benefits

- CTL pin

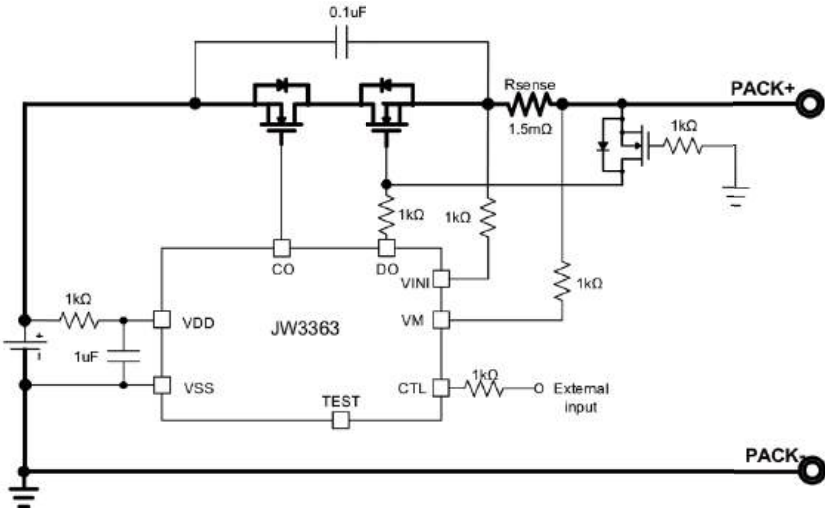
Application Fields

JW3363

1 Cell Protector with High-side NMOS Driver

Key Features

- High Side NFET Driver with a Built-in Charge Pump
- CTL Pin: Control Pin for Under Voltage 1/Under Voltage 2/Power-down mode
- Over Voltage Protection Accuracy@±15mV
- Under Voltage Protection Accuracy@±40mV
- Charge/Discharge Over-current Protection Accuracy@±1mV
- 2nd Discharge Over-current Protection Accuracy@±2mV
- Load Short-circuit Protection Accuracy@±4mV
- Low Current Consumption (TA=25°C)
  - Normal Mode: 9.0μA@Max
  - Power-down Mode:100nA@Max
- Package: WLCSP-8



Benefits

- High Side NFET Driver
- CTL pin

Application Fields

JW3421

ECC Anti-Fake IC

Key Features

- 256 bits Elliptic Curve Cryptography (ECC) Engine
- Private Digital Certificate
- Host Challenge by Software(Host → Slave)
- Security Library Concept for easy host side integration
- 96 bits Unique Chip Identification number
- 160 bytes protected Secure NVM read-only space
- 304 bytes lock protects User NVM memory
- Self-adaption 1-Wire Interface
- Package：TSNP-6-9

Benefits

- Large User Space: 304 byte
- Security Algorithms: ECC 256

Application Fields



JW3323A

Protector and Monitor IC for 6-13 Cells Battery Pack

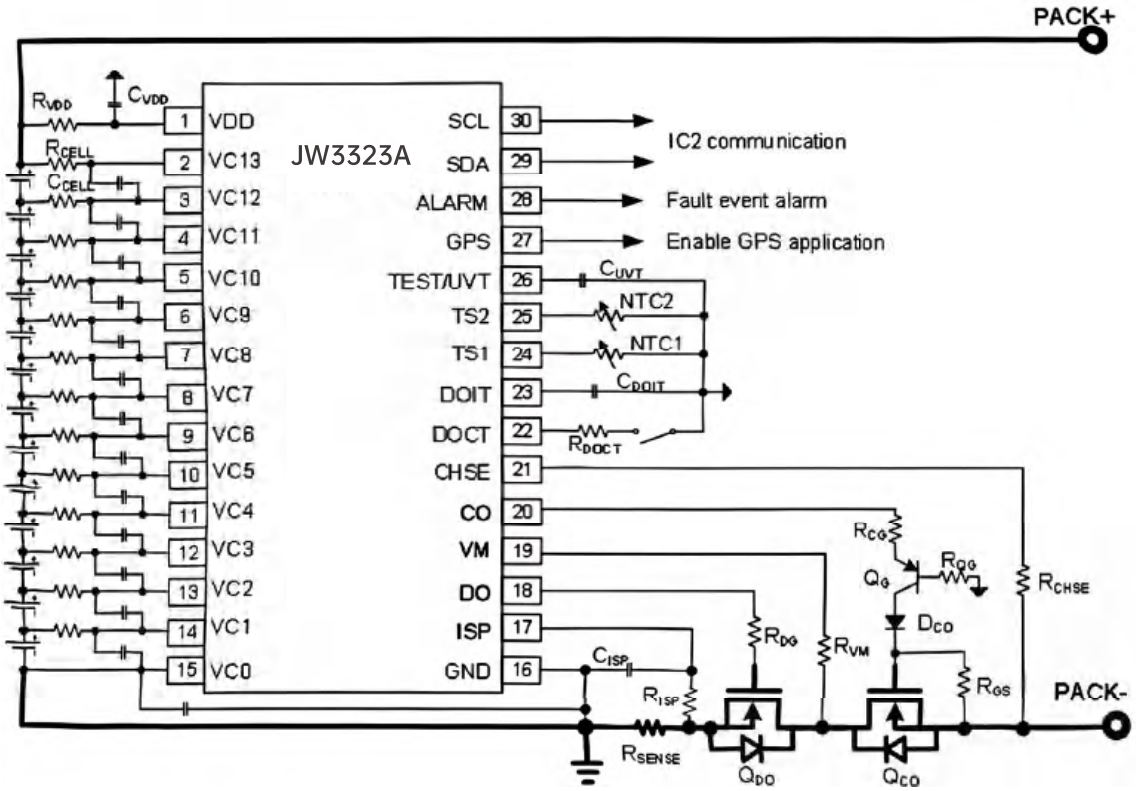
Key Features

- Voltage Sampling Accuracy@±5mV Typ.
- Under/Over Voltage Protection Accuracy@±15mV
- Charge/Discharge Over-current Protection
- Battery Under/Over-temperature Protection
- Passive Balance Function
- I2C Communication and Standalone
- Open Wire Detection
- Low Current Consumption (TA=25°C)
  - Normal Mode: 35μA Max.
  - Sleep Mode: 4μA Max
- Package：TSSOP30

Benefits

- OTP for avoiding inactive stock

Application Fields



JW3680

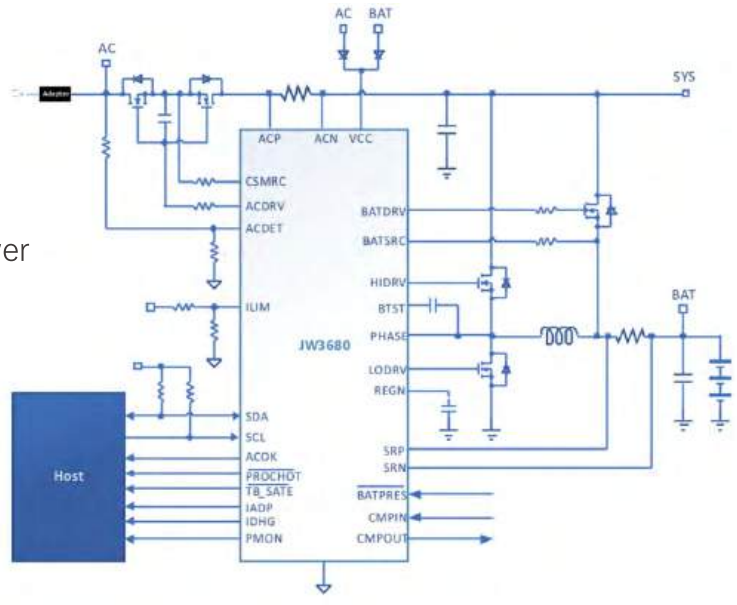
QFN-24, 2- to 4-Cells Battery Charger Controller with Hybrid Power Boost Mode

Key Features

- Hybird Power Boost (HPB) Mode Power Path Management
- Automatic NMOS Power Source Selection from Adapter or Battery
- Two_level Adapter Current Limit (Peak Power Mode)
- High Accuracy Power and Current Monitoring for CPU Throttling
- Programmable Input Current, Input Voltage, Charge Voltage, Charge and Discharge Current Limit
- Battery LEARN Function, Battery Present Monitor, Boost Mode Indicator
- Integrated Loop Compensation, BTST Diode
- Switching Frequency: 300kHz, 400kHz, 600kHz and 800kHz
- Real-time System Control on ILIM Pin to Limit Charge and Discharge Current
- Enhanced Safety Features for Over-voltage
- Protection, Over-current Protection,Battery,
- Inductor, and MOSFET Short-Circuit Protection

Benefits

- Support Battery Only Boost（BOB）Mode
- Support Input Voltage Based Dynamic Power Management
- Support Peak Power Mode



Application Fields

- Gaming Book
- Drones, Bluetooth Speakers, IP Cameras
- Industrial and Medical Equipment
- Portable Equipment with Rechargeable Batteries

JOULWATT

Battery Management Specialized IC

P/N	Function Description	Channel	Operating Voltage(V)	Quiescent Current(A)	Application Description	Package
JW3330	High Side NMOS Driver IC	4	6~90	12.5uA	High-Side NMOS Driver in BMS	TSSOP16/SOP8
JW3332	Low Side Ideal Diode Controller	1	10~150	1.1mA	Schottky Diode Replacement in Charging Circuit	SOP8
JWS22251	8:1 MUX/DeMUX Bus Switch	/	5~5.5	0.1mA	I/O Expansion	SSOP16
JW3421	ECC Anti-Fake IC	/	1.62~5	1.5mA	Battery Pack Encryption Application	PG-TSNP-6-9

BMS Protection IC

P/N	Protection Level	Cell NO.	Operation Voltage(V)	Balance Function	Cascade Function	Battery Type	Application Description	Package
JW3360-XXX	1	1	1.5~6	N	N	Lithium Battery	Mobile Phone Battery and Single Lithium Battery	X2DFN1.57*1.9-6L
JW3362-XXX	1	1	1.5~6	N	N	Lithium Battery	Wearable Battery and Single Lithium Battery	X2DFN1.2*1.2-6
JW3363-XXX	1	1	1.5~6	N	N	Lithium Battery	Steel Shell Lithium Battery	CSP1.66*1.08*0.36-8
JW3365-XXX	1	1	1.5~6	N	N	Lithium Battery	Mobile Phone Battery and Si Contained Lithium Battery	X2DFN1.57*1.9-6L
JW3412-XXX	2	2~4	3.5~28	N	N	Lithium Battery	Laptop	UDFN1.97*2.46-8
JW3410-XXX	2	2~5	3~25	N	N	Lithium Battery	Power Tools, Electric Bikes	MSOP8
JW3313-XXX	1	3	3~25	N	N	Lithium Battery	Electric Toy	MSOP10
JW3313S-XXX	1	3	3~25	N	N	Lithium Battery	Power Tool	SOP8
JW3312-XXX	1	3~5	3~35	Y	N	Lithium Battery	Backup Power. Lead to Lithium	TSSOP20
JW3318-XXX	1	3~5	3~35	Y	Y	Lithium Battery	Electric Bike, Backup Power	TSSOP20
JW3345-XXX	1	3~5	3~35	N	N	Lithium Battery	Power Tool	SOP16
JW3317-XXX	1	5~7	6~60	N	Y	Lithium Battery	Electric Bike, Scooter	TSSOP24
JW3319-XXX	1	6~7	6~40	Y	N	Lithium Battery	Electric Bike, Scooter	TSSOP24
JW3311-XXX	1	8~10	6~60	N	Y	Lithium Battery	Electric Bike, Scooter	TSSOP24

Analog Front-End

P/N	Min Cells	Max Cells	Operation Voltage(V)	Operating Temperature Range(℃)	Communication Interface	Support Cascade	Package
JW3370	4	10	8~60	-40 ~ 85	SPI	Y	TSSOP38
JW33708	4	8	8~60	-40 ~ 85	SPI	N	TSSOP38
JW3323A	6	13	6~65	-40 ~ 85	I2C	N	TSSOP30
JW3323C	6	10	6~65	-40 ~ 85	I2C	N	TSSOP30
JW33505	3	5	5~35	-40 ~ 85	I2C	N	ETSSOP24
JW33508	3	8	5~35	-40 ~ 85	I2C	N	ETSSOP24
JW33610	5	10	8~85	-40 ~ 85	I2C	N	LQFP 48
JW33614	5	14	8~85	-40 ~ 85	I2C	N	LQFP 48
JW33617	5	17	8~85	-40 ~ 85	I2C	N	LQFP 48

Charger

P/N	Battery Cells	Control Topology	Charge Current (A)	Operation V_{IN-MAX} (V)	Absolute V_{IN} (V)	Battery Voltage (V)	OTG Function	Battery Type	Control Interface	Package
JW3663	1	Linear	0.456	5.5	21	4.2	N	Li-Ion, Li-Polymer	I2C	WLCSP-9 (1.84*1.84)
JW4054	1	Linear	0.5	7.5	18	4.2	N	Li-Ion, Li-Polymer	Stand-alone	SOT23-5
JW4054A	1	Linear	0.5	7.5	18	4.35	N	Li-Ion, Li-Polymer	Stand-alone	SOT23-5
JW3665	1	Linear	1	7.5	18	4.2	N	Li-Ion, Li-Polymer	Stand-alone	DFN2*2-8
JW3665A	1	Linear	1	7.5	18	4.35	N	Li-Ion, Li-Polymer	Stand-alone	DFN2*2-8
JW3665B	1	Linear	1	7.5	18	4.33	N	Li-Ion, Li-Polymer	Stand-alone	DFN2*2-8
JW4056	1	Linear	1	7.5	18	4.2	N	Li-Ion, Li-Polymer	Stand-alone	ESOP-8
JW4056A	1	Linear	1	7.5	18	4.35	N	Li-Ion, Li-Polymer	Stand-alone	ESOP-8
JW3655E	1~4	Buck-boost	3	21	24	3~21	N	Li-Ion, Li-Polymer, Li-FePO4	Stand-alone	QFN3*4-15
JW3702	2~4	Buck-boost	12.75 (R_{CS}=10mΩ)	24	28	0~24	Y	Li-ion, Li-polymer, Li-FePO4	I2C	QFN4*4-32
JW3703	2~8	Buck-boost	12.75 (R_{CS}=10mΩ)	24	40	0~36	Y	Li-ion, Li-polymer, Li-FePO4	I2C	QFN4*4-32
JW3902	2~3	Boost	2.5	5.5	20	8.15~13.05	N	Li-Ion, Li-Polymer	I2C	QFN4*4-24
JW3903	2~3	Boost	2.5	5.5	20	8.4~13.05	N	Li-Ion, Li-Polymer	Stand-alone	QFN4*4-24
JW3647	1	Switched-cap	8(switched-cap mode) 4(bypass mode)	5.5	18	2.8~5.5	N	Li-Ion, Li-Polymer	I2C	WLCSP-36
JW3680	2~4	Buck	8.128	24	30	0~19.2	N	Li-Ion, Li-Polymer	SMBus	QFN4*4-28

05

Linear Power Supply

JoulWatt has a comprehensive range of power switch products,including load switches used to control timing and slow start, USB current limit switches applied to USB ports, electronic fuses with powerful protection functions widely used in industry, hot-swap-controllers, ORing and ideal diode controllers that can be flexibly applied and config-ured. Whether it is an input of 1V to 150V or anoutput of 100mA to hundreds A, we can provide you with powerswitch products that meet system requirements.

Load Switch

P/N	Channel	V_{IN} (V)	Max I_{OUT} (A)	I_Q (uA)	Soft Start	Enable	Fault Indicator	Programmable Current Limit	OCP	Package
JW7106	1	0.6~5.5	6	60	External	Active High	N	N	N	DFN2*2-8
JW7107S	2	0.6~5.5	6	80	External	Active High	N	N	N	DFN3*2-14
JW7113	1	2.7~5.5	2	80	Internal	Active High	Y	N	Y	SOT23-5
JW7142	2	0.6~5.5	6	55	External	Active High	N	N	N	DFN3*2-14
JW7142F	2	0.6~5.5	6	63	External	Active High	N	N	N	DFN3*2-14
JW7135R	1	1.1~5.5	2	1	Internal	Active High	N	N	N	WLCSP0.9*0.9-4
JW7124	1	0.6~5.7	5	45	External	Active High	N	N	N	WDFN2*2-10

USB Switch

P/N	Channel	V_{IN} (V)	Max I_{OUT} (A)	I_Q (uA)	Soft Start	Enable	Fault Indicator	Programmable Current Limit	OCP	Package
JW7115S-1	1	2.7~5.5	1	80	Internal	Active High	Y	N	Y	SOT23-5
JW7115S-2	1	2.7~5.5	2	80	Internal	Active High	Y	N	Y	SOT23-5
JW7115SA-1	1	2.7~5.5	1	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7115SA-2	1	2.7~5.5	2	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7145-1	1	2.7~5.5	1	80	Internal	Active High	Y	N	Y	SOT23-5
JW7145-2	1	2.7~5.5	2	80	Internal	Active High	Y	N	Y	SOT23-5
JW7145A-1	1	2.7~5.5	1	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7145A-2	1	2.7~5.5	2	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7145-2.5	1	2.7~5.5	2.5	80	Internal	Active High	Y	N	Y	SOT23-5
JW7145A-2.5	1	2.7~5.5	2.5	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7145	1	2.7~5.5	3	80	Internal	Active High	Y	N	Y	SOT23-5
JW7145A	1	2.7~5.5	3	80	Internal	Active Low	Y	N	Y	SOT23-5
JW7105B	1	2.7~5.5	3	100	Internal	Active High	N	Y	Y	TSOT23-5
JW7111S	1	2.7~5.5	2.2	100	Internal	Active High	Y	Y	Y	SOT23-6 / DFN2*2-6
JW7111SA	1	2.7~5.5	2.2	100	Internal	Active Low	Y	Y	Y	SOT23-6 / DFN2*2-6
JW7117	1	2.7~5.5	2.2	100	Internal	Active High	N	Y	Y	SOT23-5
JWH7104	1	2.5~5.5	2.2	120	Internal	Active High	Y	Y	Y	SOT23-6 / DFN2*2-6
JW7146	1	2.7~5.5	2.2	100	Internal	Active High	Y	Y	Y	SOT23-6 / DFN2*2-6
JW7146A	1	2.7~5.5	2.2	100	Internal	Active Low	Y	Y	Y	SOT23-6 / DFN2*2-6

eFuse, Hotswap, Protection

P/N	Function	Channel	FET	V_{IN} (V)	Max I_{OUT} (A)	I_Q (mA)	Soft Start	OCP	Programmable Current Limit	OVP	Package
JW7122	eFuse	2	Internal	1.2~5.5	6	0.14	External	Y	N	N	DFN3*2-14
JW7118	eFuse, OVP	1	Internal	2.8~22	2.5	0.1	Internal	Y	N	Y	SOT23-6 / DFN3*2-8
JW7112	eFuse	1	Internal	2.8~16	3	0.15	Internal	Y	Y	N	SOT23-6
JW7125	OVP	1	Internal	2.5~5.5	3	0.06	Internal	Y	N	Y	TSOT23-5
JW7126	OVP	1	Internal	2.5~5.5	3	0.06	Internal	Y	Y	Y	TSOT23-6
JW7158	Fast Protection	1	Internal	4.5~24	3	0.15	Internal	Y	Y	N	WDFN2*2-6
JW7158A	Fast Protection	1	Internal	4.5~24	3	0.15	Internal	Y	Y	N	WDFN2*2-6
JW7158H	Fast Protection	1	Internal	4.5~24	3	0.15	Internal	Y	Y	N	WDFN2*2-6
JWH71522H	eFuse	1	Internal	2.7~18	5	0.22	External	Y	Y	Y	WQFN3*4-20
JWH71522L	eFuse	1	Internal	2.7~18	5	0.22	External	Y	Y	Y	WQFN3*4-20
JWH71524H	eFuse	1	Internal	2.7~18	5	0.22	External	Y	Y	Y	WQFN3*4-20
JWH71524L	eFuse	1	Internal	2.7~18	5	0.22	External	Y	Y	Y	WQFN3*4-20
JWH7165M	eFuse	1	Internal	2.7~16	25	1	External	Y	Y	Y	QFN3*5-22
JWH7160	eFuse	1	Internal	4~16	50	1.8	External	Y	Y	Y	LGA5*5-32
JWH7160A	eFuse	1	Internal	4~16	50	1.8	External	Y	Y	Y	LGA5*5-32
JW7228	Protection	1	External	9~80	-	0.53	External	Y	Y	Y	SOP8
JW7228P	Protection	1	External	9~80	-	0.53	External	Y	Y	Y	MSOP10
JW7222	Hotswap	1	External	2.5~18	-	1	External	Y	Y	N	MSOP10
JW7221	Hotswap	1	External	9~80	-	0.51	External	Y	Y	Y	MSOP10
JW7221L	Hotswap	1	External	9~80	-	0.51	External	Y(latch)	Y	Y	MSOP10
JW7211	Hotswap, ORing	1	External	10~80	-	1.1	External	Y	Y	Y	TSSOP16

ORing and Ideal Diode

P/N	Channel	FET	High-side/Low-side	V_{IN} (V)	I_Q (A)	Features	Package
JW7201	2	External	High-side	6~80	360uA	Fault Indicator	DFN4*3-14 / SOP16
JW7202	2	External	Low-side	10~150	1.4mA	ORing	SOP8
JW7203	1	External	Low-side	10~150	1.1mA	ORing	SOP8
JW7211	1	External	Low-side	10~80	1.1mA	ORing+Hotswap	TSSOP16
JW7260	1	External	High-side	6~80	380uA	ORing	TSOT23-6
JW7265	1	External	High-side	6~60	295uA	Oring, EN Control, Low IQ	TSOT23-6

Reset

P/N	Function	Channel	Supply Range (V)	I_Q (uA)	Reset Voltage Threshold(V)	Reset Voltage Accuracy	Time Delay (us)	Features	Package
JWH7302	Voltage Detector	2	3~16	20	0.6	±1.5%	Adjustable	Reset and Gate Driver Outputs	DFN3*3-10

LDO

P/N	V_{IN} (V)	I_{OUT} (mA)	I_Q (uA)	V_{OUT} (V)	Features	Package
JW7808-1.2	2.2~5.5	300	12	1.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-1.5	2.2~5.5	300	12	1.5	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-1.8	2.2~5.5	300	12	1.8	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-1.9	2.2~5.5	300	12	1.9	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7808-2.2	2.2~5.5	300	12	2.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7808-2.5	2.2~5.5	300	12	2.5	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-2.7	2.2~5.5	300	12	2.7	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7808-2.75	2.2~5.5	300	12	2.75	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7808-2.8	2.2~5.5	300	12	2.8	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-2.85	2.2~5.5	300	12	2.85	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-2.9	2.2~5.5	300	12	2.9	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-3.0	2.2~5.5	300	12	3.0	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-3.1	2.2~5.5	300	12	3.1	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-3.2	2.2~5.5	300	12	3.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-3.3	2.2~5.5	300	12	3.3	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7808-4.0	2.2~5.5	300	12	4.0	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7808-4.5	2.2~5.5	300	12	4.5	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-1.2	2.2~5.5	300	12	1.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-1.5	2.2~5.5	300	12	1.5	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5
JW7806-1.8	2.2~5.5	300	12	1.8	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-1.9	2.2~5.5	300	12	1.9	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7806-2.2	2.2~5.5	300	12	2.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7806-2.5	2.2~5.5	300	12	2.5	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-2.7	2.2~5.5	300	12	2.7	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7806-2.75	2.2~5.5	300	12	2.75	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7806-2.8	2.2~5.5	300	12	2.8	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-2.85	2.2~5.5	300	12	2.85	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-2.9	2.2~5.5	300	12	2.9	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-3.0	2.2~5.5	300	12	3.0	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-3.1	2.2~5.5	300	12	3.1	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-3.2	2.2~5.5	300	12	3.2	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5

LDO

P/N	V_{IN} (V)	I_{OUT} (mA)	I_Q (uA)	V_{OUT} (V)	Features	Package
JW7806-3.3	2.2~5.5	300	12	3.3	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7806-4.0	2.2~5.5	300	12	4.0	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4
JW7806-4.5	2.2~5.5	300	12	4.5	Enable, OTP, OCP, Low noise, High PSRR	X2DFN1*1-4,SOT23-5
JW7827	0.8~5.5	500	50	0.8~5	Enable, OTP, OCP, Low noise, High PSRR,with BIAS	UDFN1.2*1.2-6
JW7820A	1.7~6	500	80	1.5~4.7	Enable, OTP, OCP, Low noise, High PSRR, PGOOD	WDFN2*2-8
JW7820B	1.7~6	500	80	Adjustable	Enable, OTP, OCP, Low noise, High PSRR, PGOOD	WDFN2*2-8
JW7809-1.2	2.2~5.5	500	12	1.2	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-1.5	2.2~5.5	500	12	1.5	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-1.8	2.2~5.5	500	12	1.8	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-2.5	2.2~5.5	500	12	2.5	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-2.8	2.2~5.5	500	12	2.8	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-2.85	2.2~5.5	500	12	2.85	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-2.9	2.2~5.5	500	12	2.9	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-3.0	2.2~5.5	500	12	3.0	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-3.1	2.2~5.5	500	12	3.1	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-3.2	2.2~5.5	500	12	3.2	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-3.3	2.2~5.5	500	12	3.3	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-4.0	2.2~5.5	500	12	4.0	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JW7809-4.5	2.2~5.5	500	12	4.5	Enable, OTP, OCP, Low noise, High PSRR	SOT23-5/DFN2*2-6
JWH7821A	2.2~6.5	1000	100	0.8~6	Enable, OTP, OCP, Low noise, High PSRR	DFN3*3-8
JW78001	2.2~5.5	1000	350	0.8~5	Enable, OTP, OCP, Low noise, High PSRR	DFN2*2-6
JW78002	2.2~5.5	1500	350	0.8~5	Enable, OTP, OCP, Low noise, High PSRR	DFN3*3-8
JW7870A	1.7~5.5	250	0.5	1.2~3.8(fixed options)	Enable, OTP, OCP, Ultra Low IQ, Low Dropout	WDFN1*1-4, SOT23-5
JWH7822A	1.1~6.5	2000	5000	0.8~5.15	Enable, OTP, OCP, Low noise, High PSRR	QFN3.5*3.5-20/QFN5*5-20
JWH7823A	1.1~6.5	3000	5000	0.8~5.15	High Accuracy, High PSRR, Ultra Low noise, Low Dropout	VQFN3.5*3.5-20
JWH78231	1.2~6.5	3000	5400	0.8~5.2	High Accuracy, High PSRR, Ultra Low noise	VQFN5*5-20
JWH7824	1.1~6.5	4000	5000	0.8~5.2	High Accuracy, High PSRR, Ultra Low noise, Low Dropout	VQFN3.5*3.5-20
JW7830	2.7~20	300	30	Adjustable and fixed options	High PSRR, Low noise, Low Dropout	ESOP8, SOT89
JWH7833	2.1~20	1500	1000	Adjustable and fixed options	Enable, OTP, OCP, High PSRR, Low noise	SOP8

Multi-channel LDO

P/N	Channel	V_{IN} (V)	I_{OUT} (mA)	V_{OUT} (V)	I2C Interface	Package
JW7897	7	LDO1:0.6~3.0	1400	0.496~1.512	Y	WLCSP-20
		LDO1/2:0.6~3.0	1700	0.496~1.512		
		LDO3~7:2.1~5.5	400	1.504~3.544		

PoE-PSE

P/N	Channel	PoE Protocol	MOSFET	Supply Range(V)	Interface	Special Features	Package
JWH7290	1	IEEE802.3af/at	External	44~60	I2C	PoE++	QFN5*7-38
JWH7291	4	IEEE802.3af/at	External	44~60	I2C	~	QFN5*7-38
JWH72964	4	IEEE802.3af/at	Internal	44~60	I2C	45W per Port	QFN5*5-32
JWH72964A	4	IEEE802.3af/at	Internal	44~60	I2C	45W per Port	QFN5*5-32
JWH72965	4	IEEE802.3af/at	Internal	44~60	I2C	45W per Port, Pmax manage	QFN7*7-48
JWH72965A	4	IEEE802.3af/at	Internal	44~60	I2C	45W per Port, Pmax manage,3.3V power	QFN7*7-48
JW87251	4	IEEE802.3af/at	External	44~60	I2C	PoE++	QFN5*7-38
JWH7294	8	IEEE802.3af/at/bt	Internal	44~60	I2C	bt	QFN8*8-58
JWH7294A	8	IEEE802.3af/at/bt	Internal	44~60	I2C	bt	QFN8*8-58
JWH7295	8	IEEE802.3af/at	Internal	44~60	I2C	~	QFN8*8-58
JWH7295A	8	IEEE802.3af/at	Internal	44~60	I2C	~	QFN8*8-58
JWH72977	8	Pseudo-IEEE802.3af/at	Internal	44~60	None	Pmax manage	QFN6*6-28
JWH72978	8	Pseudo-IEEE802.3af/at	Internal	44~60	I2C	Pmax manage	QFN6*6-28

PoE-PD

P/N	PoE Protocol	HotSwap	PoE Current Limit/mA	PoE Inrush Limit/mA	Supply Range(V)	DC/DC Control	Special Features	Package
JWH7241	IEEE802.3af/at	Internal	890	135	0~57	NA	Support Auxiliary Adaptor ORing Power Supply	ESOP8
JWH7241A	IEEE802.3af/at	Internal	890	135	0~57	NA	NA	ESOP8
JWH7241B	IEEE802.3af/at	Internal	890	135	0~57	NA	Support Auxiliary Adaptor ORing Power Supply Quickly Release the Energy	ESOP8
JWH7242	IEEE802.3af	Internal	NA	110	0~57	NA	Support Auxiliary Adaptor ORing Power Supply	SOT23-5/ ESOP8
JWH7242A	IEEE802.3af	Internal	NA	110	0~57	NA	Support Auxiliary Adaptor ORing Power Supply	SOT23-5
JWH7243	IEEE802.3af/at	Internal	890	135	0~57	NA	cost down, Support Auxiliary Adaptor ORing Power Supply	ESOP8
JWH7232	IEEE802.3af	Internal	530	135	0~57	Flyback	Support Auxiliary Adaptor ORing Power Supply	QFN4*5-28
JWH7232B	IEEE802.3af	Internal	530	135	0~57	Flyback	Support Auxiliary Adaptor ORing Power Supply	QFN4*5-28

USB Charging Controller

P/N	Input Voltage Range(V)	Role	CC/CV	Protocol								Application	Package
				BC1.2	Apple	AFC	QC2.0	QC3.0	PD3.2/PPS	SCP A/B	UFCS		
JW3119E	2.9~24	DFP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Adaptor	QFN4*4-24
JW3118	2.9~24	DFP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Adaptor	QFN4*4-24

06

H-Bridge

JoulWatt half-bridge drivers integrate a high-side and low-side driver and reduce switching losses, handle noisy environments and improve system efficiency.

H-Bridge

P/N	V_{IN} (V)	Current Capability (A)	RDSON (HS+LS) (mΩ)	Integrated MOS	I_Q (uA)	Typical Application	Package
JW7903	3~15	1	1000	Y	0.04	Relay Driver, IR-cut Driver, Motor Driver	DFN2*2-8 / SOT23-6
JW7951C	4~20	3	40	Y	37	Wireless Charger,Full-Bridge Power Stage	QFN3*4-15
JW7952	2~13	5	22	Y	55	Wireless Charger,Full-Bridge Power Stage with Demodulation and LDO	QFN3*3.5-21
JW7953	1~20	5	28	Y	80	Wireless Charger Transmitter，Full-Bridge with Demodulation and Drivers for Switchable Resonant Capacitor	VQFN4*4-25

07

Gate Driver

JoulWatt gate drivers are used to drive power switching devices such as MOSFETS, IGBTs, SiC FETs, and GaN FETs. The product range includes low-side drivers, half-bridge drivers, and isolated drivers. Choosing the right driving solution helps you easily design efficient, reliable, and light weight power electronic systems.

Gate Driver

P/N	Power Switch Type	Channel	Configuration	Max Boot-Voltage(V)	Capacity (SRC/SNK, A)	Supply Range(V)	Propagation Delay(ns)	Delay Match(ns)	Package
JW9616	MOSFET IGBT	1	Low-side	/	4.0/4.0	4.5~18	18	/	DFN3*3-6
JW9617	MOSFET IGBT	1	Low-side	/	4.0/4.0	4.5~18	18	/	SOT23-5
JWH7917	MOSFET IGBT	1	Low-side	/	4.0/4.0	4.5~20	18	/	SOT23-5/DFN3*3-6
JWH7924	MOSFET IGBT	2	Low-side	/	4.5/4.5	4.5~20	13	0.5	SOP8/EMSOP8 /DFN3*3-8
JW9624	MOSFET IGBT	2	Low-side	/	4.5/4.5	4.5~20	13	1	SOP8/EMSOP8 /DFN3*3-8
JW9610	MOSFET	2	High-side & low-side	120	3.5/3.5	8~15	42	4	SOP8
JW9611	MOSFET	2	High-side & low-side	120	4.0/4.0	8~15	32	2	SOP8/DFN4*4-8
JWH7911B	MOSFET	2	High-side & low-side	120	4.0/4.0	8~15	33	2	SOP8 / DFN4*4-8
JWH7915	MOSFET	2	High-side & low-side	120	4.0/4.0	8~15	42	4	DFN4*4-10/DFN3*3-9
JWH7935	GaN	2	High-side & low-side	700	2.0/4.0	9~15	80	10	WQFN5*7-30
JW7930	MOSFET	2	High-side & low-side	600	0.45/0.9	9~15	80	15	SOP8

08

Analog ICs

JoulWatt's analog signal-chain products cover amplifiers, data converters, clock devices and signal detection devices, etc. The features of wide bandwidth, high precision, and low noise make the products adaptable to a wide range of application scenarios.

JOULWATT

General-Purpose Operational Amplifier

P/N	Ratings	Channel	Vcc (V)	Rail-to-rail	Iq/ channel (uA, Typ)	Input Bias Current (pA, Typ)	GBW (MHz, Typ)	Slew rate (V/us, Typ)	Vos at 25C (mV, Max)	Vn (nV/rtHz, Typ)	Unit-gain Stable	Package
JWS29001	Industry	1	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	SOT23-5, SOT353, X2DFN0.8
JWS29002	Industry	2	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	VDFN2*2-8,SOP8,MSOP8
JWS29004A	Industry	4	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	TSSOP14,SOP14
JWS29262	Industry	2	2.5~5.5	In, Out	750	40	10	6	2	21 @ 1kHz	Y	SOP8,MSOP8
JWS29264	Industry	4	2.5~5.5	In, Out	750	40	10	6	2	21 @ 1kHz	Y	TSSOP14
JWS29501	Industry	1	1.7~5.5	In, Out	0.6	1	0.015	0.006	3	177 @ 1kHz	Y	SOT23-5
JWS29502	Industry	2	1.7~5.5	In, Out	0.6	1	0.015	0.006	3	177 @ 1kHz	Y	SOP8
JWS29504	Industry	4	1.7~5.5	In, Out	0.6	1	0.015	0.006	3	177 @ 1kHz	Y	TSSOP14
JWS29012	Industry	1	2.1~5.5	In, Out	4	1	0.15	0.08	2.5	82 @ 1kHz	Y	SOT23-5
JWS29014	Industry	2	2.1~5.5	In, Out	4	1	0.15	0.08	2.5	82 @ 1kHz	Y	SOP8
JWS29081	Industry	1	3~36	Out	680	10	3.5	15	2	30 @ 1kHz	Y	SOT23-5
JWS29082	Industry	2	3~36	Out	680	10	3.5	15	2	30 @ 1kHz	Y	TSSOP8,SOP8,MSOP8
JWS29084	Industry	4	3~36	Out	680	10	3.5	15	2	30 @ 1kHz	Y	TSSOP14,SOP14
JWS29286	Industry	2	3~36	Out	3000	80	10	8	4	33 @ 1kHz	Y	SOP8
JWS29288	Industry	4	3~36	Out	3000	80	10	8	4	33 @ 1kHz	Y	SOP14

Precision Operational Amplifier

P/N	Channel	Vcc (V)	Rail-to-rail	Iq/ channel (uA, Typ)	Vos @ 25C (mV, Max)	Vos Drift (uV/℃ , Max)	Input Bias Current (pA, Typ)	GBW (MHz, Typ)	Slew Rate (V/us, Typ)	Vn (nV/rtHz, Typ)	Unit-gain Stable	Package
JWS29515	1	1.8~5.5	In, Out	750	0.35	1	1	11	11	8@10kHz	Y	SOT23-5
JWS29516	2	1.8~5.5	In, Out	750	0.35	1	1	11	11	8@10kHz	Y	SOP8
JWS29518	4	1.8~5.5	In, Out	750	0.35	1	1	11	11	8@10kHz	Y	SOP14

Comparators

P/N	Ratings	Channel	Vcc (V)	Iq/ channel (uA, Typ)	Input Bias Current (pA, Typ)	Vos @25C (mV, Typ)	Hysteresis (mV, Typ)	Tpd(ns) @20mV Overdrive	Tpd(ns) @100mV Overdrive	Rise Time (ns)	Fall Time (ns)	Output Type	Short-Circuit Current (mA, Typ)	Package
JWS29021	Industry	1	1.8~5.5	60	14	2	0.6	47	42	7	5	Push-pull	50	SOT23-5
JWS29521	Industry	1	1.7~5.5	0.44	5	0.5	5	1600	1200	230	300	Push-pull	36	SOT23-5
JWS29911	Industry	1	1.8~5.5	40	6	0.6	6	120	76	120	250	Open -drain	-45	SOT23-5
JWS29912	Industry	2	1.8~5.5	40	6	0.6	6	120	76	120	250	Open -drain	-45	SOP8,TSSOP8, MSOP8
JWS29914	Industry	4	1.8~5.5	40	6	0.6	6	120	76	120	250	Open -drain	-45	SOP14,TSSOP14
JWS29982	Industry	2	2.4~5.5	1500	10	0.86	5	8	7.5	3	3	Pusl-pull	±100	SOP8
JWS29901	Industry	1	2.5~36	130	1	±0.3	/	1400	/	/	/	Open -drain	-50	SOT23-5
JWS29902	Industry	2	2.5~36	130	1	±0.3	/	1400	/	/	/	Open -drain	50	SOP8,TSSOP8, MSOP8
JWS29904	Industry	4	2.5~36	130	1	±0.3	/	1400	/	/	/	Open -drain	-50	SOP14,TSSOP14

JOULWATT

Current-Sensing Amplifier

P/N	Channel	Vcc (V)	Common Mode Voltage (V)	IQ(uA, Max@ -40℃ ~125 ℃)	Input offset (uV, Max@ -40℃~125℃)	Input offset drift(Max, uV/℃)	Gain (V/V)	Gain Error (Max@ -40℃ ~125 ℃)	CMRR (dB, Typ)	-3dB Bandwidth (kHz, Typ)	Output Type	Package
JWS24285	2	2.7~5.5	2.7~76	1350	25	0.1	20	±0.25%	160	130	Analog	MSOP8

Digital Current-Sensing

P/N	Channel	Vcc (V)	Common Mode Voltage(V)	Iq (uA, Max)	Input Offset (uV, Max@ -40℃~125℃)	Input Offset Drift (Typ,uV/℃)	Gain Error (Max@ -40 ℃ ~125 ℃)	Gain error drift (ppm/℃ ,Typ)	CMRR (dB, Typ)	Reso-lution (bits,Typ)	Shunt Range (mV,Typ)	Inter-face	Package
JWS24226	1	2.7~5.5	0~36	450	±10	0.02	0.10%	10	140	16	-81.92~+81. L529175	I2C or SMBus	MSOP10

Analog Switch

P/N	Channel	Switch Config	Vcc/Vss (V)	Input Range (V)	Iq (uA, Max)	-3dB Bandwidth (kHz, Typ)	Ron (ohm, Typ)	On Leakage Current (uA, Typ)	Off Leakage Current (uA, Typ)	tON (us, Typ)	tOff (us, Typ)	Package
JWS22251	8	SP8T	-0.5~7	-0.5~7	3	100	2	0.000	0.000	0.006	0.006	SSOP16
JWS22750	2	SPDT	1.8~5.5	-2.5~Vcc	17	44	0.5	1.6	1	0.4	0.12	MSOP10, UQFN10
JWS22751	1	SPST	1.8~5.5	-3~18	350	100	0.095	3.6	1	1000(max)	10(max)	DFN1.2*1.5-6
JWS24157N	1	SPDT	-4~ -12	Vss~GND	80	350	1.6	0.01	0.01	0.12(max)	0.14(max)	SOT363

Series Reference

P/N	Output Voltage(V)	Initial accuracy (Max) (%)	Temp coeff (Max @ -40~125) (ppm/C)	Noise (uVpp/V) 0.1 ~ 10 Hz	Long term Stability (typ) 1st 1000 hr	VIN (V)(Max)	IQ (uA)(Typ)	Operating Temperature (℃)	Package
JWS23318	1.8	0.05%	5	20	130	5.5	45	-55~135	SOT23-3
JWS23320	2	0.05%	5	22	130	5.5	45	-55~135	SOT23-3
JWS23325	2.5	0.05%	5	28	130	5.5	45	-55~135	SOT23-3
JWS23330	3	0.05%	5	34	130	5.5	45	-55~135	SOT23-3
JWS23333	3.3	0.05%	5	36	130	5.5	45	-55~135	SOT23-3
JWS23340	4	0.05%	5	43	130	5.5	45	-55~135	SOT23-3
JWS23345	4.5	0.05%	5	50	130	5.5	45	-55~135	SOT23-3
JWS23350	5	0.05%	5	61	130	5.5	45	-55~135	SOT23-3

High Precision SAR ADC

P/N	Description	Input channels Diff (Single-Ended)	Archi-techure	Reso-lution (Bits)	SNR @1kHz (TYP) (dB)	INL	THD @1kHz (dB)	Program-mable Data Rate (kSPS)	Input Range (V)	Power Dissi-pation (mW)	Inter-face	Operating Temprature (℃)	Package
JWS27860	16-Bit, 1-MSPS, Serial Interface Low-Power, Single-end Input SAR Analog-to-Digital Converter	1	SAR	16	88	+/-4	-100	1000	3.0~5.5	5.61 (max)	Serial Interface	-40~125	MSOP10
JWS27861	16-Bit, 1-MSPS, Serial Interface Low-Power, True-Differential Input SAR Analog-to-Digital Converter	1	SAR	16	94	+/-2	-107	1000	3.0~5.5	5.61 (max)	Serial Interface	-40~125	MSOP10

JOULWATT

Clock Buffer

P/N	Input Type	Input Port Number	Output Port Number	Output Type	Device Type	Function	Input Frequency	Output Frequency	Additive Jitter	Package
JWH2031	LVPECL, LVDS, HCSL, SSTL, LVCMOS, LVTTL	3	10	LVCMOS	Single-Ended Buffer	3:10 Differential to Single-Ended Buffer	DC~200Mhz	DC~200Mhz	30fs	QFN5*5-32L
NCS25D31	LVPECL, LVDS, CML, SSTL, HSTL, HCSL, LVCMOS	3	10	LVPECL, LVDS, HCSL, Hi-Z	Differential Buffer	3:10 Universal Differential Buffer	DC~3.1GHz	DC~3.1GHz	43fs@ LVPECL	QFN7*7-49
NCSA25D34	LVPECL, LVDS, CML, SSTL, HSTL, HCSL, LVCMOS	3	4	LVPECL, LVDS, HCSL, Hi-Z	AEC-Q100 Automotive Differential Buffer	3:4 Universal Differential Buffer	DC~3.1GHz	DC~3.1GHz	43fs@ LVPECL	QFN5*5-32
NCS25D34	LVPECL, LVDS, CML, SSTL, HSTL, HCSL, LVCMOS	3	4	LVPECL, LVDS, HCSL, Hi-Z	Differential Buffer	3:4 Universal Differential Buffer	DC~3.1GHz	DC~3.1GHz	43fs@ LVPECL	QFN5*5-32
NCS25S10	LVPECL, LVDS, HCSL, SSTL, LVCMOS, LVTTL	3	10	LVCMOS	Single-Ended Buffer	3:10 Differential to Single-Ended Buffer	DC~200Mhz	DC~200Mhz	30fs	QFN5*5-32
NCS25304S	LVCMOS	1	4	LVCMOS	Single-Ended Buffer	1:4 Single-Ended Buffer	DC~200Mhz	DC~200Mhz	40fs	TSSOP-8
NCS25105	LVPECL, LVDS, HCSL, SSTL, LVCMOS, LVTTL	3	5	LVCMOS	Single-Ended Buffer	2：5 Diff to Single-Ended Buffer	DC~200Mhz	DC~200Mhz	6fs@PCIE Gen 6	QFN5*5-24
NCS25104	LVCMOS	1	4	LVCMOS	Single-Ended Buffer	4 Outputs Single-Ended Buffer	DC~200Mhz	DC~200Mhz	6fs@PCIE Gen 6	DFN-8
NCS25200	HCSL/LP-HCSL	1	20	LP-HCSL	PCIE Buffer	20 Outputs PCIE Gen6 Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	QFN10*10-72
NCS25201	HCSL/LP-HCSL	1	20	LP-HCSL	PCIE Buffer	20 Outputs PCIE Gen6 Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	GQFN6*6-80
NCS25080	HCSL/LP-HCSL	1	8	LP-HCSL	PCIE Buffer	8 Outputs PCIE Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	QFN6*6-48
NCS25083	HCSL/LP-HCSL	1	8	LP-HCSL	PCIE Buffer	8 Outputs PCIE Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	QFN6*6-48
NCS25220	HCSL/LP-HCSL	1	20	LP-HCSL	PCIE Buffer	20 Outputs PCIE Gen6 Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	QFN10*10-72
NCS25221	HCSL/LP-HCSL	1	20	LP-HCSL	PCIE Buffer	20 Outputs PCIE Gen6 Buffer	DC~400Mhz	DC~400Mhz	6fs@PCIE Gen 6	GQFN6*6-80

PLL

P/N	Input Type	Input Port Number	Output Port Number	Output Type	Device Type	Function	Input Frequency	Output Frequency	Additive Jitter	Package
NCS23395E	XTAL, Single-Ended,Differential-Ended inputs	4	12	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	4 Inputs, 1 Mux, 4 PLLs, 12 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	80fs	QFN9*9-64
NCS23391	XTAL, Single-Ended,Differential-Ended inputs	N/A	12	LVDS, LVPECL, LVCMOS, HCSL	Clock Generator	12 Outputs Clock Generator	N/A	100Hz~ 1028MHz	140fs	QFN9*9-64
NCS23381	XTAL, Single-Ended,Differential-Ended Inputs	4	12	LVDS, LVPECL, LVCMOS, HCSL	Wireless Jitter Attenuator	4 Inputs, 4 Mux, 4 PLLs, 12 Outputs, Wireless Jitter Attenuator	8k~ 750MHz	8k~2GHz	140fs	QFN9*9-64
NCS23347	XTAL, Single-Ended,Differential-Ended inputs	4	8	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	4 Inputs, 4 Mux, 4 PLLs, 8 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	140fs	QFN9*9-64
NCS23345	XTAL, Single-Ended,Differential-Ended inputs	4	10	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	4 Inputs, 1 Mux, 4 PLLs, 10 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	140fs	QFN9*9-64
NCS23571	XTAL, Single-Ended Inputs	2	11	LVCMOS, LVPECL	Clock Generator	10 Output Clock Generator	25MHz	100MHz \125MHz \156.25MHz \33.33MHz	220fs	QFN6*6-40

PLL

P/N	Input Type	Input Port Number	Output Port Number	Output Type	Device Type	Function	Input Frequency	Output Frequency	Additive Jitter	Package
NCS23012	XTAL, Single-Ended,Differential-Ended inputs	2	12	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	2 Inputs, 1 Mux, 4 PLLs, 12 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	140fs	QFN10*10-72
NCS23322	XTAL, Single-Ended,Differential-Ended inputs	2	12	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	2 Inputs, 1 Mux, 4 PLLs, 12 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	140fs	QFN9*9-64
NCS23312	XTAL, Single-Ended,Differential-Ended inputs	4	12	LVDS, LVPECL, LVCMOS, HCSL	Jitter Attenuator+Clock Synthesizer	4 Inputs, 1 Mux, 4 PLLs, 12 Outputs, Jitter Attenuator	8k~1GHz	8k~1GHz	80fs	QFN9*9-64
NCS233C5	XTAL, Single-Ended,Differential-Ended inputs	5	12	LVDS, LVPECL, LVCMOS, HCSL	Network Synchronization PLL	5 Inputs, 4 Mux, 4 PLLs, 12 Outputs, Network Synchronization PLL	0.5Hz~ 1GHz	0.5Hz ~1.5GHz	140fs	QFN9*9-64
NCS23018	XTAL, Single-Ended,Differential-Ended inputs	5	12	LVDS, LVPECL, LVCMOS, HCSL	Network Synchronization PLL	5 Inputs, 4 Mux, 4 PLLs, 12 Outputs, Network Synchroni-zation PLL	0.5Hz~ 1GHz	0.5Hz ~2.1GHz	140fs	QFN10*10-72

Signal Converter

P/N	Input Type	Output Type	Device Type	Function	Speed	Package
NCS8626	USB Type-C/DP1.4	VGA	Converter	Type C/DP1.2 to VGA Converter w/i PD	5.4G	QFN5*5-48
NCS8823E	USB Type-C/DP1.2	VGA	Converter	DisplayPort to VGA Converter on USB Type-C	5.4G	QFN4*4-32
NCS8801S	LVDS/RGB	eDP	Converter	RGB/LVDS to eDP Converter w/o Scaler	2.7G	QFN7*7-56
NCS8805	LVDS/RGB	eDP	Converter	RGB/LVDS to eDP Converter w/ Scaler	3.24G	QFN7*7-56
NCS8621	USB Type-C/DP1.2	HDMI2.0/VGA	Converter	Type C/DP1.2 to HDMI2.0 and VGA Converter w/i PD	6G	QFN8*8-68
NCS8623	USB Type-C/DP1.2	HDMI2.0	Converter	Type C/DP1.2 to HDMI2.0 Converter w/i PD	6G	QFN5*5-48
NCS8620	USB Type-C/DP1.4	HDMI2.0/USB3.0	Converter	Type C/DP1.2 to HDMI2.0Converter w/i PD and USB3.0 MUX	6G	QFN10*10-88

Retimer & Redriver

P/N	Input Type	Input Port Number	Output Port Number	Output Type	Device Type	Function	Speed	Package
NCS8510	USB 3.1 and DisplayPort 1.4	4	4	USB 3.1 and DisplayPort 1.4	Redrier	USB Type-C 10Gbps Bi-Directional Linear Redriver	10G	WBQFN4*6-40
NCS8610	DVI 1.0 and HDMI 1.4b, 2.0b and 2.1	4	4	DVI 1.0 and HDMI 1.4b, 2.0b and 2.1	Redrier	12-Gbps AC/DC-Coupled HDMI or DP Redriver	12G	WQFN5*5-40
NCS8612	DVI 1.0 and HDMI 1.4b, 2.0b and 2.1	4	4	DVI 1.0 and HDMI 1.4b, 2.0b and 2.1	Redrier	12-Gbps AC/DC-Coupled HDMI or DP Redriver	12G	WBQFN6*6-48

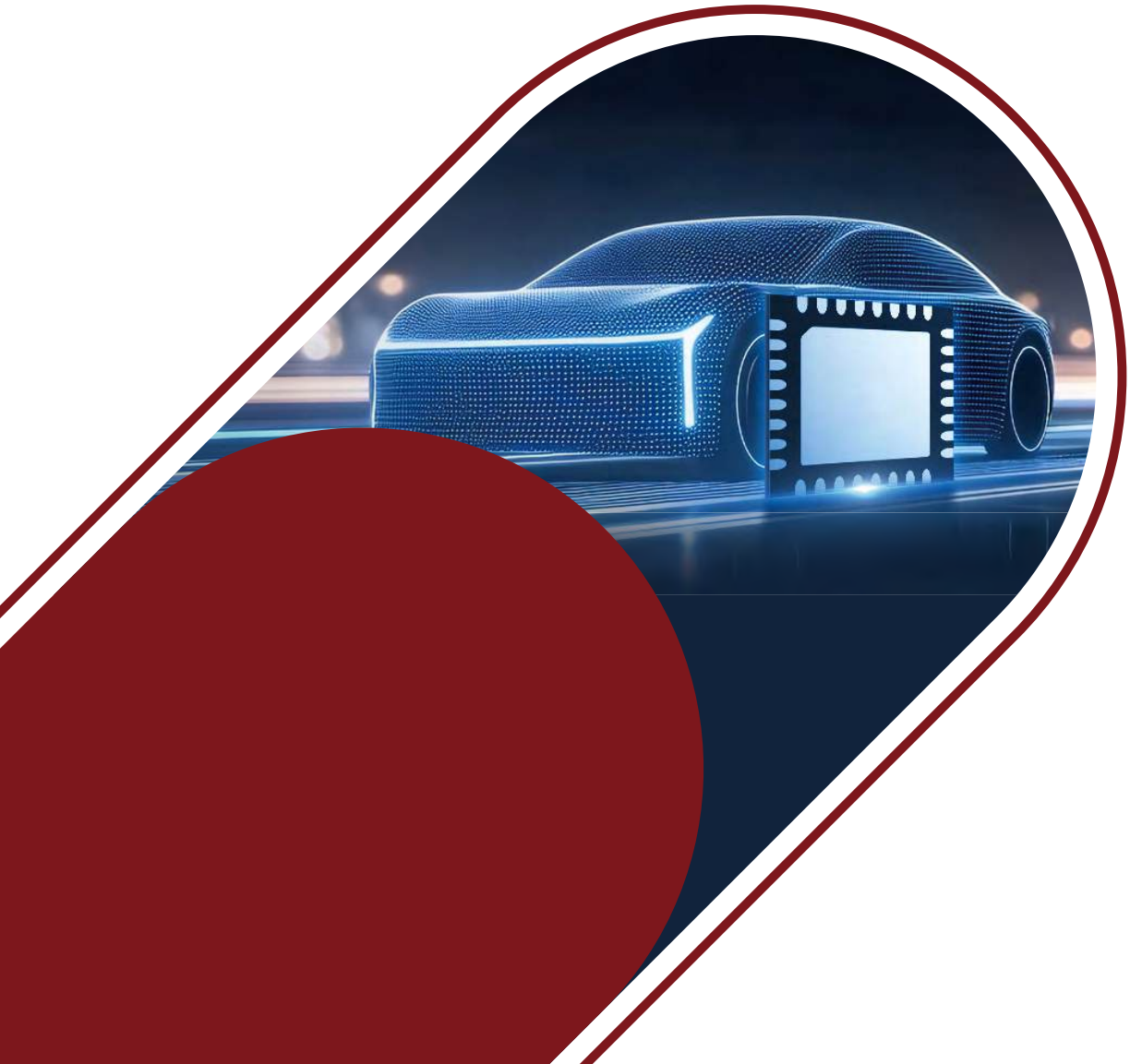
CAN

P/N	Rating	Feature	Data rate (Mbps)	Vcc (V)	VIO (V)	Loop Delay (ns, Typ)	Bus fault Protection (V)	RX Common Mode Voltage (V)	TDOM (ms, Typ)	BUS ESD (HBM) (kV)	BUS ESD (IEC-Contact) (kV)	Package
JWS21042	Industry	Standby, VIO	5	4.5~5.5	3.0~5.5	148	± 70	± 30	5	± 16	± 15	SOP8
JWS21042N	Industry	Standby	5	4.5~5.5	3.0~5.5	148	± 70	± 30	5	± 16	± 15	SOP8

09

MCU

JoulWatt Microcontroller (MCU) product line focuses on high-performance motor control and new energy management as its core domains, with extensive expertise in brushless motor control algorithms and energy system management solutions. The MCU products are widely used in industrial automation, automotive intelligent control, new energy control and management (including new energy vehicles, photovoltaic power generation, energy storage systems, etc.), high-precision home appliance motor control, and intelligent drive applications for consumer electronics, among other critical fields.



32-Bit MCU

P/N	CPU	Max Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	RAM (Byte)	Data Memery (Byte)	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	LIN	SPI	IIC	IWDG	WWDG	RTC/WT	LCD	Package
LCM32F037K6T8	32-Bit	96	1.8~5.5	32K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	-	LQFP32-7*7-P0.8
LCM32F037K6U8	32-Bit	96	1.8~5.5	32K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	-	QFN32-5*5*0.75-P0.5
LCM32F037H6S8	32-Bit	96	1.8~5.5	32K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	-	SSOP24
LCM32F005F6P8	32-Bit	96	1.8~5.5	32K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	-	TSSOP20
LCM32F005F6U8	32-Bit	96	1.8~5.5	32K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	-	QFN20-3*3*0.75-P0.4
LCM32F039C8T8	32-Bit	96	1.8~5.5	64K	8K	-	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	-	2	1	√	√	√	√	LQFP48-7*7*1.4-P0.5
LCM32F038K8T8	32-Bit	64	1.8~5.5	64K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	1*12Bit 5*8Bit	3	√	3	-	1	1	√	√	√	-	LQFP32-7*7*1.4-P0.8
LCM32F038K8U8	32-Bit	64	1.8~5.5	64K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	1*12Bit 5*8Bit	3	√	3	-	1	1	√	√	√	-	QFN32-5*5*0.75-P0.5
LCM32F038H8S8	32-Bit	64	1.8~5.5	64K	4K	-	7*16Bit、1*24Bit	1*12Bit double-sampling	3	1*12Bit 5*8Bit	3	√	3	-	1	1	√	√	√	-	SSOP24
LCM32F052K8T7	32-Bit	64	1.8~5.5	64K	8K	-	5*16Bit、1*24Bit	1*12Bit	-	1*10Bit	2	√	3	√	2	1	√	-	√	-	LQFP32-7*7*1.4-P0.8
LCM32F052R8T7	32-Bit	64	1.8~5.5	64K	8K	-	5*16Bit、1*24Bit	1*12Bit	-	1*10Bit	2	√	3	√	2	1	√	-	√	√	LQFP64-10*10*1.4-P0.5
LCM32F052C8T7	32-Bit	64	1.8~5.5	64K	8K	-	5*16Bit、1*24Bit	1*12Bit	-	1*10Bit	2	√	3	√	2	1	√	-	√	√	LQFP48-7*7*1.4-P0.5
LCM32F067H8S8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	SSOP24
LCM32F067I8P8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	TSSOP28
LCM32F067I8V8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN28-4*4*0.75-P0.5
LCM32F067H8W8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN24-4*4*0.75-P0.5
LCM32F006F8P8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	TSSOP20
LCM32F006F8W8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN20-3*3*0.75-P0.4
LCM32F068H8S8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	SSOP24
LCM32F068I8P8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	TSSOP28
LCM32F068I8V8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN28-4*4*0.75-P0.5
LCM32F068H8W8	32-Bit	108	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN24-4*4*0.75-P0.5
LCM32F062H8S7	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	SSOP24
LCM32F062H8V7	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN24-4*4*0.75-P0.5
LCM32F062I8V7	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN28-4*4*0.75-P0.5

JOULWATT

32-Bit MCU

P/N	CPU	Max Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	RAM (Byte)	Data Memery (Byte)	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	LIN	SPI	IIC	IWDG	WWDG	RTC/WT	LCD	Package
LCM32F063H8S8	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	SSOP24
LCM32F063H8V8	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN24-4*4*0.75-P0.5
LCM32F063F8W8	32-Bit	96	2.0~5.5	64K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	QFN20-3*3*0.75-P0.4
LCM32F053HCS6	32-Bit	72	2.0~5.5	64K +512K	10K	1.5K	5*16Bit、1*24Bit	1*12Bit double-sampling	-	1*10Bit	2	√	2	√	1	1	√	-	√	-	SSOP24

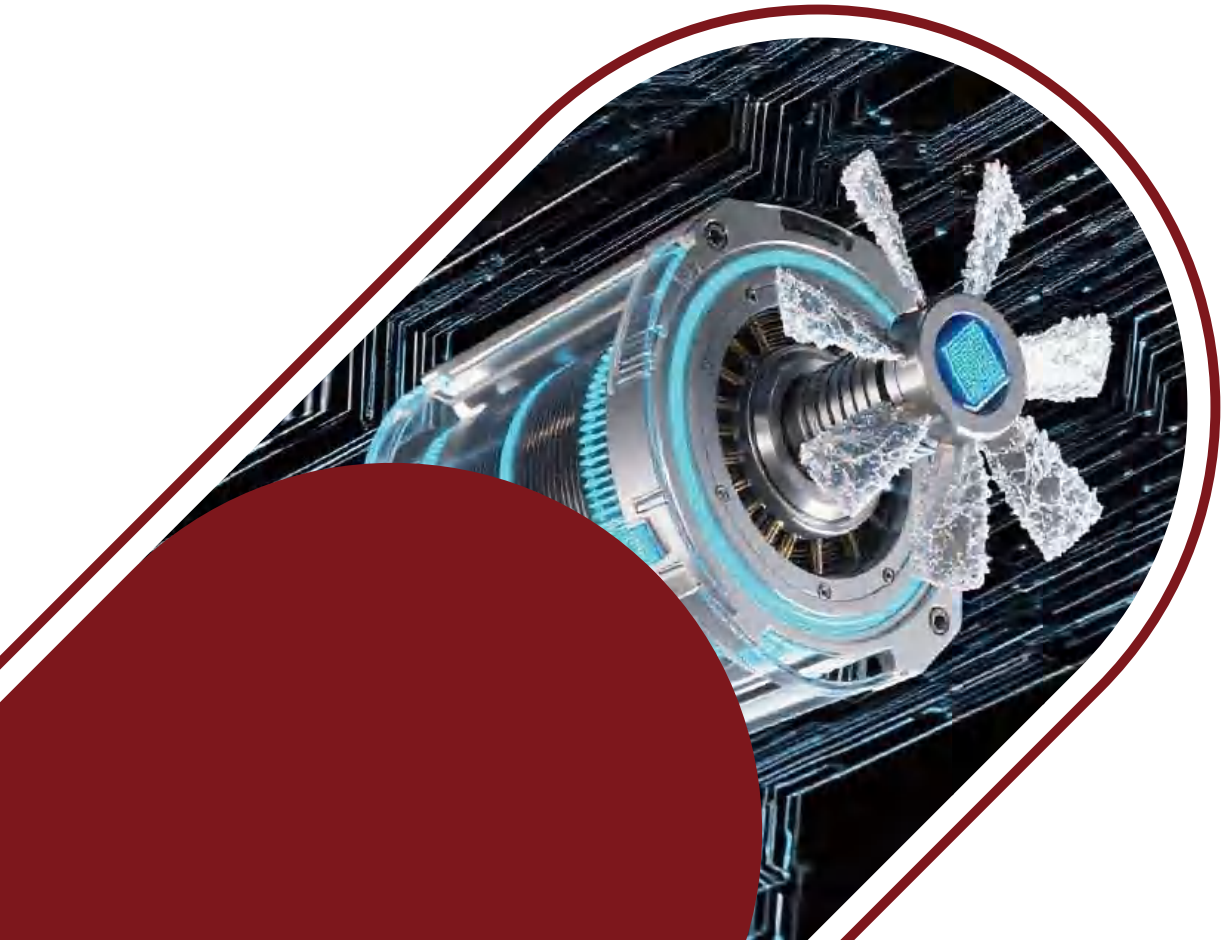
8-Bit MCU

P/N	CPU	Max Operating Frequency(MHz)	Voltage Range (V)	Flash ROM (Byte)	EEPROM (Byte)	RAM (Byte)	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	SPI	IIC	IWDG	WWDG	Package
LCM08F04GT20	8051	8	1.8~5.5	4K	128	256	3*16Bit	1*12Bit	1	-	√	√	2	-	1	√	-	TSSOP20
LCM08F04GS16	8051	8	1.8~5.5	4K	128	256	3*16Bit	1*12Bit	1	-	√	√	2	-	1	√	-	SOP16
LCM08F04GD12	8051	8	1.8~5.5	4K	128	256	3*16Bit	1*12Bit	1	-	√	√	2	-	1	√	-	DFN12-4*2.5*0.75-P0.4
LCM08F04GD8	8051	8	1.8~5.5	4K	128	256	3*16Bit	1*12Bit	1	-	√	√	2	-	1	√	-	DFN8-2*3*0.75-P0.5
LCM08F08SS24	8051 (Enhanced)	16	1.8~5.5	8K	128	512	4*16Bit	1*12Bit	-	-	√	√	2	1	1	√	√	SSOP24
LCM08F08T20	8051 (Enhanced)	16	1.8~5.5	8K	128	512	4*16Bit	1*12Bit	-	-	√	√	2	1	1	√	√	TSSOP20
LCM08F002AQ20	8051 (Enhanced)	16	1.8~5.5	8K	128	512	4*16Bit	1*12Bit	-	-	√	√	2	1	1	√	√	QFN20-3*3*0.75-P0.4
LCM08F003HT20	8051 (Enhanced)	16	1.8~5.5	16K	256	1K	4*16Bit	1*12Bit	-	1*10Bit	√	√	2	1	1	√	√	TSSOP20
LCM08F16L48F	8051	8	2.0~5.5	16K	256	512	3*16Bit	1*12Bit	-	-	√	-	1	1	-	√	-	LQFP48-7*7*1.4-P0.5
LCM08F16SS24	8051	8	2.0~5.5	16K	256	512	3*16Bit	1*12Bit	-	-	√	-	1	1	-	√	-	SSOP24
LCM08F18HS24	8051 (Enhanced)	16	1.8~5.5	16K	256	1K	4*16Bit	1*12Bit	2	1*10Bit	√	√	2	1	1	√	√	SSOP24
LCM08F18HT20	8051 (Enhanced)	16	1.8~5.5	16K	256	1K	4*16Bit	1*12Bit	1	1*10Bit	√	√	2	1	1	√	√	TSSOP20
LCM08F18HD12	8051 (Enhanced)	16	1.8~5.5	16K	256	1K	4*16Bit	1*12Bit	1	1*10Bit	√	√	2	1	1	√	√	DFN12-4*2.5*0.75-P0.4

Motor Driver

JoulWatt's motor driver product line centers on highly integrated SoC solutions, delivering comprehensive coverage for both high-voltage and low-voltage application scenarios while supporting a full range of power levels from low to high power. The product series highly integrates MCUs, driver circuits, and power MOSFETs, forming system-level solutions that significantly reduce peripheral circuit complexity and system size. The high-voltage products support consumer and industrial motor applications at 310V and above, while the low-voltage series is optimized for automotive front-load applications, consumer electronics, and home appliance motor control scenarios.

Leveraging high reliability, low power consumption, and precise control characteristics, this product line is widely used in industrial automation, new energy vehicle motor control, smart home appliances, precision instrument drives, and other fields, providing flexible and efficient solutions for applications across different power levels.



SoC

P/N	CPU	Ma* Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	EEPROM (Byte)	RAM (Byte)	Data Memery (Byte)	Pre-driver	Pre-driver voltage (V)	Pre-driver voltage (V)	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	LIN	SPI	IIC	IWDG	WWDG	RTC /WT	Package
LCP018BK32EU7	8-Bit	16	1.8~5.5	16K	256	1K	-	NN	150	4.5~20	4*16Bit	1*12Bit	2	1*10Bit	2	√	2	-	1	1	√	√	-	QFN32-5*5*0.75-P0.5
LCP018AH31ES7	8-Bit	16	1.8~5.5	16K	256	1K	-	NP	40	5.5~36	4*16Bit	1*12Bit	2	1*10Bit	2	√	2	-	1	1	√	√	-	SSOP24
LCP037BT32EU8	32-Bit	96	1.8~5.5	32K	-	4K	-	NN	280	5~20	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	QFN40-5*5*0.75-P0.4
LCP037BK32EU8	32-Bit	96	1.8~5.5	32K	-	4K	-	NN	280	5~20	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	QFN32-5*5*0.75-P0.5
LCP037BK32ET8	32-Bit	96	1.8~5.5	32K	-	4K	-	NN	280	5~20	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	LQFP32-7*7*1.4-P0.8
LCP037AH31E(G)S8	32-Bit	96	1.8~5.5	32K	-	4K	-	NP	40	5.5~36	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	SSOP24
LCP037AK31E(G)U8	32-Bit	96	1.8~5.5	32K	-	4K	-	NP	40	5.5~36	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	QFN32-5*5*0.75-P0.5
LCP037AK31EV8	32-Bit	96	1.8~5.5	32K	-	4K	-	NP	40	5.5~36	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	QFN32-4*4*0.75-P0.4
LCP037CC32EU8	32-Bit	96	1.8~5.5	32K	-	4K	-	NN	600	4.5~20	7*16Bit、1*24Bit	1*12Bit double-sampling	3	2*10Bit	3	√	2	-	2	1	√	√	√	QFN38-7*7*0.75-P0.5
LCP039BC32EU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	260	4.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN48-7*7*0.75-P0.5
LCP039BC32GU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	250	6.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN48-7*7*0.75-P0.5
LCP039BS32GU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	250	6.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN56-7*7*0.75-P0.4
LCP039BT32EU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	260	4.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN40-5*5*0.75-P0.4
LCP039BT32GU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	250	6.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN40-5*5*0.75-P0.4
LCP039BK32GU8	32-Bit	96	1.8~5.5	64K	-	8K	-	NN	250	6.5~20	6*16Bit、1*24Bit、1*32Bit	1*12Bit double-sampling	4	1*10Bit	3	√	3	√	2	1	√	√	√	QFN32-5*5*0.75-P0.5
LCP067AH31E(G)S8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NP	40	5~28	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	SSOP24
LCP067AK31GU8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NP	40	5~28	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN32-5*5*0.75-P0.5
LCP067AK31GV8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NP	40	5~28	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN32-4*4*0.75-P0.4
LCP067AE30GN8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NP	40	5~28	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	SOP16
LCP067AK31EV8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NP	40	5.5~36	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN32-4*4*0.75-P0.4
LCP067BK32EU8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN	150	4.5~20	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN32-5*5*0.75-P0.5
LCP067BU32EV8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN	150	4.5~20	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN36-4*4*0.55-P0.35
LCP067AT33YU8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN +LDO	75	4.5~70	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN40-5*5*0.75-P0.4
LCP067AT33EU8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN +LDO	70	6.7~65	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN40-5*5*0.75-P0.4
LCP067CC36EU8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN +LDO	600	8~20	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	QFN38-7*7*0.75-P0.5
LCP067BC33CT8	32-Bit	108	2.0~5.5	64K	-	10K	1.5K	NN +LDO	150	4.3~29	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	1	1	√	-	√	LQFP48-7*7*1.4-P0.5

Fully integrated product series

P/N	CPU	Ma* Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	EEPROM (Byte)	RAM (Byte)	Data Memery (Byte)	MOS(mΩ)	Ma* Current Output (A)	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	LIN	SPI	IIC	IWDG	WWDG	RTC /WT	Package
LCT64415KU	32-Bit	96	4.9~28	64K	-	10K	1.5K	NP: 500mΩ	1.5	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	QFN32-5*5*0.75-P0.5
LCT64415FP	32-Bit	96	4.9~28	64K	-	10K	1.5K	NP: 500mΩ	1.5	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	TSSOP20-F
LCT94435TU	32-Bit	108	5.0~28	64K	-	10K	1.5K	NP: 40.6mΩ	3.5	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	QFN40-6*6*0.85-P0.5
LCT94450TU	32-Bit	108	5.5~28	64K	-	10K	1.5K	NP: 95mΩ	3	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	QFN40-6*6*0.85-P0.5
LCT94450FQ	32-Bit	108	5.5~28	64K	-	10K	1.5K	NP: 95mΩ	3	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	SSOP21
LCT94460TU	32-Bit	108	5.0~28	64K	-	10K	1.5K	NP: 40.6mΩ	4	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	QFN39-6*6*0.85-P0.5
LCT94460FQ	32-Bit	108	5.0~28	64K	-	10K	1.5K	NP: 40.6mΩ	4	5*16Bit、1*24Bit	1*12Bit double-sampling	3	1*10Bit	2	√	2	√	2	1	√	-	√	SSOP21

11

Sensor

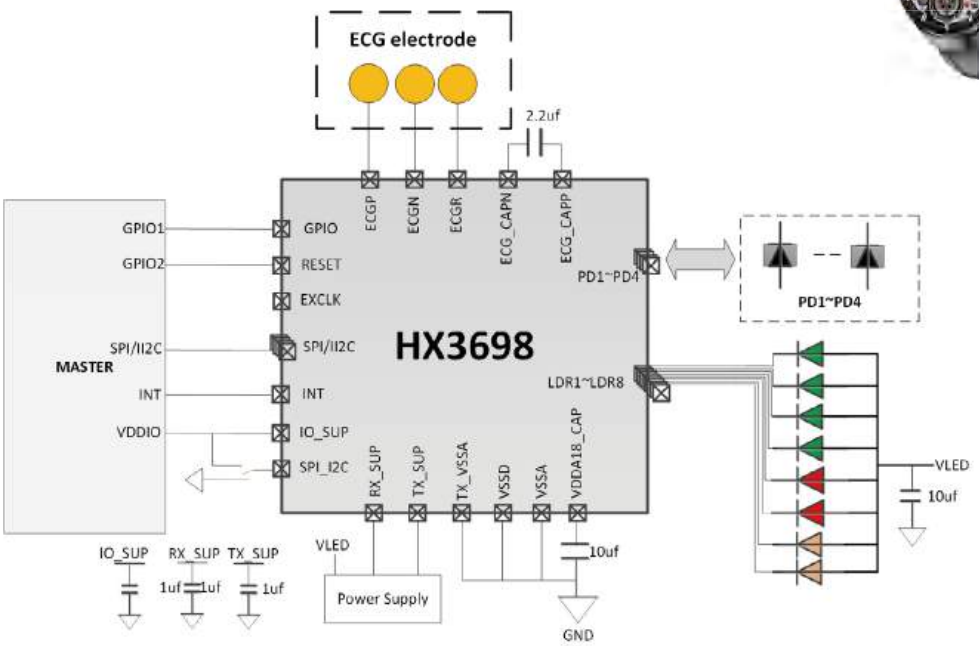
JoulWatt focusing on high-performance sensor chips， products cover optical sensing chips, capacitive sensing chips, and supporting algorithms.
Products are mainly used in consumer electronics such as smart wear, mobile communication and PDA laptop, industrial and medical fields.

HX3698

Key Features

- Ultra-Low Power, High Precision, Cost-Effective – 112 dB dynamic range PPG AFE
- 4PD + 8LDR + 2st_BGR + 4AFE
- IIC/SPI interface
- Wide Skin Tone Coverage – Stable across 15 levels, including dark skin
- Supporting Multiple Structural Designs

Application Fields

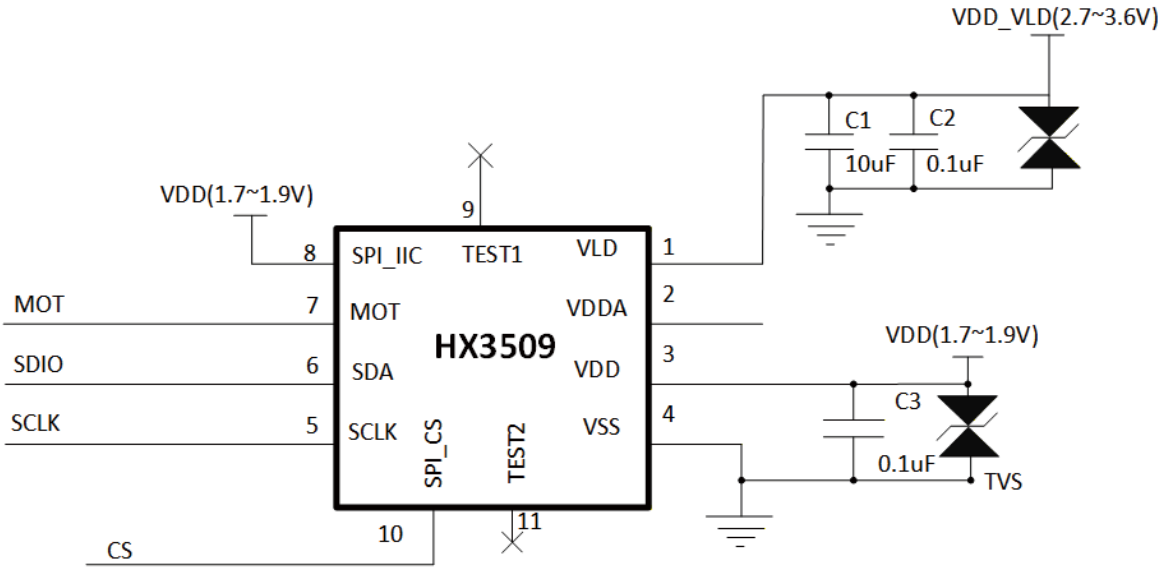


HX3509

Key Features

- Ultra-compact、300 rpm Tracking Rate、Ultra-low power consumption at just 1 mA
- Integrated High-Precision Laser & Driver Circuit
- Up to 3200 CPI

Application Fields



HX3218

Ambient Light And Proximity Sensor

Description

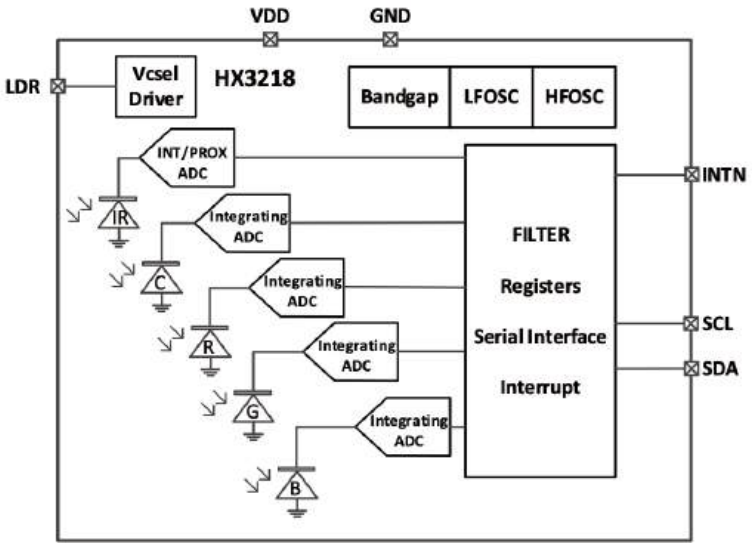
HX3218 is an optical sensor that can control an external IR VCSEL and I2C interface. With excellent ambient light detection capability, the device provides ambient light sensing judgment to realize backlight and display brightness control, and at the same time, it senses infrared light to realize judgment for proximity and distance.

Key Features

- Programmable ALS gain configuration, flexible integration time configuration
- Channel1 24bit Resolution
- Photodiodes RGB+Clear+IR
- FOV： >120°
- Support Four-channel VCSEL drive
- Support FIFO Function
- Low Power Standby, Standby current 2μA
- Power Supply with VDD :1.7~2.0V, Power Supply with I2C ： 1.2~3.6V
- IR power supply with LEDA voltage:2.7~3.6V
- 12PIN OLGA-3.34*1.36*0.5mm

Application Fields

- Phone & Pad



HX3241

Multi-channel Spectral color Sensor

Description

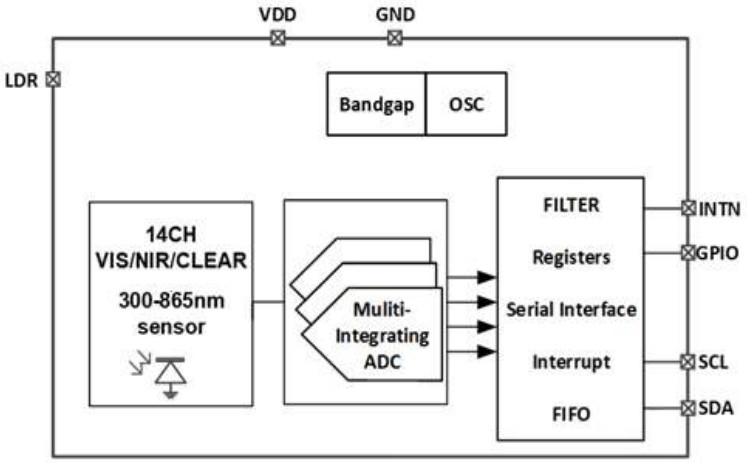
HX3241 is a 14-channel multispectral sensor designed for color detection and spectral analysis applications. Its spectral response covers a wavelength range from 300nm to 865nm. Eleven of the optical channels cover the visible spectrum (VIS), with one near-infrared (NIR) channel and four Clear channels. The NIR channel can be used in combination with other VIS channels for light source detection. The device also integrates a dedicated channel for detecting 50Hz ambient light flicker.

Key Features

- 16bits ADC for high resolution
- Support up to 400kHz I2C Serial Interface
- 300nm to 865nm sensor channel support recognition of different light sources
- Wide range，Flexible gain and Integration time configuration
- Power Supply with VDD :1.7~2.0V， Power Supply with I2C： 1.2~3.6V
- Light flicker detection with build-in FIFO
- 8PIN OLGA-3.1*2.0*1.0mm

Application Fields

- Phone & Pad & Smart wearable devices



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Health Monitoring Sensor

PN	Supply Voltage(V)	Interface	Temperature (℃)	Number of AFEs	LDR Interface	PD Interface	Dynamic Range	Ambient Light Cancellation Order	Ambient Light Cancellation Range(uA)	Liveness Detection	FIFO Depth	Package
HX3600	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-30~80	1	2	1	92	1	8	Optical	0	QFN16 3.0*3.0*0.75
HX3602H	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-30~80	1	2	0 (Integrated PD)	90	1	8	Optical	0	ODFN8 2.65*2.0*0.7
HX3605	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-30~80	1	3	0 (Integrated PD)	95	1	32	Optical	32*3bytes	ODFN12 2.65*2.0*0.7
HX3917	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-30~80	1	3	1	98	1	32	Optical	64*3bytes	ODFN14 2.65*2.0*0.7
HX3918H	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-40~85	1	3	0 (Integrated PD)	100	1	32	Optical +3cap	64*3bytes	OLGA-14 2.65*2*0.7
HX3690Q	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-40~85	1	4	2	100	1	64	Optical	64*3bytes	QFN16 3.0*3.0*0.55
HX3691	VDD=2.7~3.6 Vbus=1.7~3.6	IIC	-40~85	1	3	2	105	1	64	Optical +3cap	128*3bytes	QFN20 3.0*3.0*0.55
HX3695S	RX_SUP=2.7~3.6 TX_SUP=2.7~3.6 IO_SUP=1.7~3.6	IIC/SPI	-20~85	1	6	2	110	1	192	Optical	256*3bytes	WLCSP25 2.0*2.0*0.5
HX3695	RX_SUP=2.7~3.6 TX_SUP=2.7~3.6 IO_SUP=1.7~3.6	IIC/SPI	-20~85	1	8	4	110	1	192	Optical	256*3bytes	WLCSP42 2.955*2.655*0.55
H3697S	RX_SUP=2.7~3.6 TX_SUP=2.7~3.6 IO_SUP=1.7~3.6	IIC/SPI	-20~85	2	6	2	112	2	192	Optical	512*3bytes	WLCSP25 2.0*2.0*0.5
HX3697	RX_SUP=2.7~3.6 TX_SUP=2.7~3.6 IO_SUP=1.7~3.6	IIC/SPI	-20~85	2	8	4	112	2	192	Optical	512*3bytes	WLCSP42 2.955*2.655*0.55
HX3698	RX_SUP=2.7~3.6 TX_SUP=2.7~3.6 IO_SUP=1.7~3.6	IIC/SPI	-20~85	4	8	4	112	2	192	Optical	2048*3bytes	WLCSP42 2.93*2.63*0.468

Optical Proximity Sensor

PN	Supply Voltage(V)	Interface	Temperature (℃)	Number of AFEs	LDR Interface	PD Interface	Dynamic Range	Ambient Light Cancellation Order	Ambient Light Cancellation Range(uA)	Liveness Detection	FIFO Depth	Package
HX3002	"VDD=2.9~3.6V Vbus=1.7~3.6V"	IIC	-20~85℃	1	0	0	65	0	0	SAR	0	OLGA-14 2.65×2×0.7mm
HX3009	"VDD=2.9~3.6V Vbus=1.7~3.6V"	IIC	-20~85℃	1	0	0	65	0	0	SAR	0	OLGA-6 2.0×1.0×0.5mm
HX3011	"VDD=2.7~3.6V Vbus=1.7~3.6V"	IIC	-40~85℃	1	3	0 (Integrated PD)	100	1	32	Optical	64*3bytes	OLGA-14 2.65×2×0.7mm

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Optical Tracking Sensor

PN	Supply Voltage(V)	Interface	Temperature (℃)	Max Tracking Speed	CPI	Maximum Frame Rate(FPS)	Maximum Acceleration(g)	Power Consumption	Working Distance	Package
HX3507D	VDD: 2 connection types Type1: 2.7~3.6 Type2:1.7~1.9 VLD: 2.7~3.6	SPI	-20~60	300rpm std (up to 1000rpm)@ distance 0.5~3mm	3200	4000	10	0.7mA @crownshaft moving (Normal) 25uA @crownshaft holding (sleep 1) 10uA @crownshaft holding (sleep 2) 4uA @crownshaft holding (power down)	0.5~3mm(on sts surface)	OLGA8 3.5*2.0*0.67
HX3508LS	VDD: 2 connection types Type1: 2.7~3.6 Type2:1.7~1.9 VLD: 2.7~3.6	IIC/SPI	-20~60	300rpm std (up to 1000rpm)@ distance 0.5~3mm	3200	4000	10	0.6mA @crownshaft moving (Normal) 25uA @crownshaft holding (sleep 1) 10uA @crownshaft holding (sleep 2) 4uA @crownshaft holding (power down)	0.5~3mm(on sts surface)	OLGA8 3.5*3.2*0.5
HX3509	VDD: 2 connection types Type1: 2.7~3.6 Type2:1.7~1.9 VLD: 2.7~3.6	IIC/SPI	-20~70	300rpm std (up to 1000rpm)@ distance 0.5~3mm	3200	4000	10	0.6mA @ crown shaft moving (Normal) 25uA @ crown shaft holding (sleep 1) 10uA @ crown shaft holding (sleep 2) 5uA @ crown shaft holding (power down)	0.5~3mm(on sts surface)	OLGA8 3.5*3.2*0.5
HX3510	VDD: 2 connection types Type1: 2.7~3.6 Type2:1.7~1.9 VLD: 2.7~3.6	IIC	-20~70	300rpm std (up to 1000rpm)@ distance 0.5~3mm	3200	4000	10	0.6mA @crownshaft moving (Normal) 25uA @crownshaft holding (sleep 1) 10uA @crownshaft holding (sleep 2) 4uA @crownshaft holding (power down)	0.5~3mm(on sts surface)	OLGA8 2.0*2.0*0.5

SAR Sensor

PN	Supply Voltage(V)	Interface	Temperature (℃)	Input Channel	Capacitance Resolution(aF)	Offset Compensation Range(pF)	Built-in Environment Compensation Algorithm	Multi-level Threshold	Capacitive Gain	Algorithm for New Regulatory	Package
HX9023S	1.8	I2C	-40~85	3	1	400	Y	N	N	N	WLCSP0.7014*1.49-8
HX9031AS	1.8	I2C	-40~85	5	1	400	Y	N	N	N	DFN1.8*2.1-10
HX9031ASE	1.8	I2C	-40~85	5	1	400	Y	N	N	N	DFN1.8*2.1-10
HX9034	1.8	I2C	-40~85	3+1	0.59	800	Y	Y	N	N	WLCSP1.155*1.225-9
HX9035	1.8	I2C	-40~85	4+1	0.59	800	Y	Y	N	N	WLCSP1.155*1.225-9
HX9036	1.8	I2C	-40~85	7+1	0.59	800	Y	Y	N	N	QFN1.8*1.9-12
HX9036ES	1.8	I2C	-40~85	7+1	0.59	800	Y	Y	Y	N	QFN1.8*1.9-12
HX9134	1.8	I2C	-40~85	3+1	0.59	800	Y	Y	Y	N	WLCSP1.148*1.080-9
HX9235	1.8	I2C	-40~85	4+1	0.19	800	Y	Y	Y	Y	FO1.257*1.189-9

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Capacitive Sensor

PN	Supply Voltage (V)	Interface	Temperature (℃)	Input Channel	Capacitance Resolution(aF)	Offset Compensation Range(pF)	Built-in Environment Compensation Algorithm	Multi-level Threshold	Capacitive Gain	Algorithm for New Regulatory	Package
HX91315	1.8	I2C	-40~85	5	0.59	400	Y	Y	N	N	DFN1.8*2.1-10
HX9033S	3.3	I2C	-40~85	5	25	100	Y	Y	N	N	DFN1.8*2.1-10

Pressure Sensor

PN	Supply Voltage (V)	Interface	Temperature (℃)	Input Channel	Capacitance Resolution(aF)	Offset Compensation Range(pF)	Built-in Environment Compensation Algorithm	Multi-level Threshold	Capacitive Gain	Algorithm for New Regulatory	Package
HX93108	1.8	I2C	-40~85℃	12	1	100	Y	Y	Y	N	WLCSP1.41*1.41-16
HX93109	1.8	I2C	-40~85℃	16	1	100	Y	Y	Y	N	QFN3*3-20

Ambient Light Sensor

PN	Supply Voltage(V)	Interface	Temperature (℃)	Type	Pins	ALS Bits	ALS Sensitivity	Flicker Range	FIFO Size	Interrupt	Package
HX3222	1.7~2.0	I2C	-30~85	ALS+Flicker	6	16	0.28mlux/lsb	50~500	512Bytes	Y	OLGA2*1*0.5
HX3222ARNL	1.7~2.0	I2C	-30~85	ALS	6	16	0.16mlux/lsb	0	0	Y	OLGA2*1*0.5
HX3222CSR	1.7~2.0	I2C	-30~85	ALS+Flicker	6	16	0.28mlux/lsb	50~500	512Bytes	Y	WLCSP 1.169 * 1.169 * 0.206
HX3223	1.7~2.0	I2C	-30~85	RGB+Flicker	6	16	0.47mlux/lab	50~500	512Bytes	Y	OLGA2*1*0.5
HX3225U	1.7~2.0	I2C	-30~85	ALS+UV	6	16	0.28mlux/lsb	50~500	512Bytes	Y	OLGA2*1*0.35
HX3222F	1.7~2.0	I2C	-30~85	ALS+Flicker	6	16	1mlux/lsb	50~2000	1024Bytes	Y	OLGA2*1*0.5

Optical Proximity Sensor

PN	Type	Supply Voltage(V)	LEDA	Interface	Pins	ALS Bits	PS Bits	Interrupt	Package
HX32062SECR/DR	ALS+PS(LED)	1.7~2.0	2.7~3.6	I2C	8	16	16	Y	QFN4.0mm*1.5mm*1mm
HX32062SEAR	ALS+PS(LED)	1.7~2.0	2.7~3.6	I2C	8	16	16	Y	QFN4.0mm*1.5mm*1mm
HX32012	ALS+PS(VCSEL)	1.7~2.0	2.7~3.6	I2C	6	16	16	Y	QFN2.0mm*1.0mm*0.5mm
HX32013	2PS(LED)	1.7~2.0	2.7~3.6	I2C	8	/	16	Y	QFN2.0mm*2.0mm*0.7mm
HX3218	RGB+PS	1.7~2.0	2.7~3.6	I2C	12	16	16	Y	QFN3.34mm*1.36mm*0.5mm
HX3241	14 channel ALS	1.7~2.0	/	I2C	8	16	/	Y	QFN3.1mm*2.0mm*1.0mm

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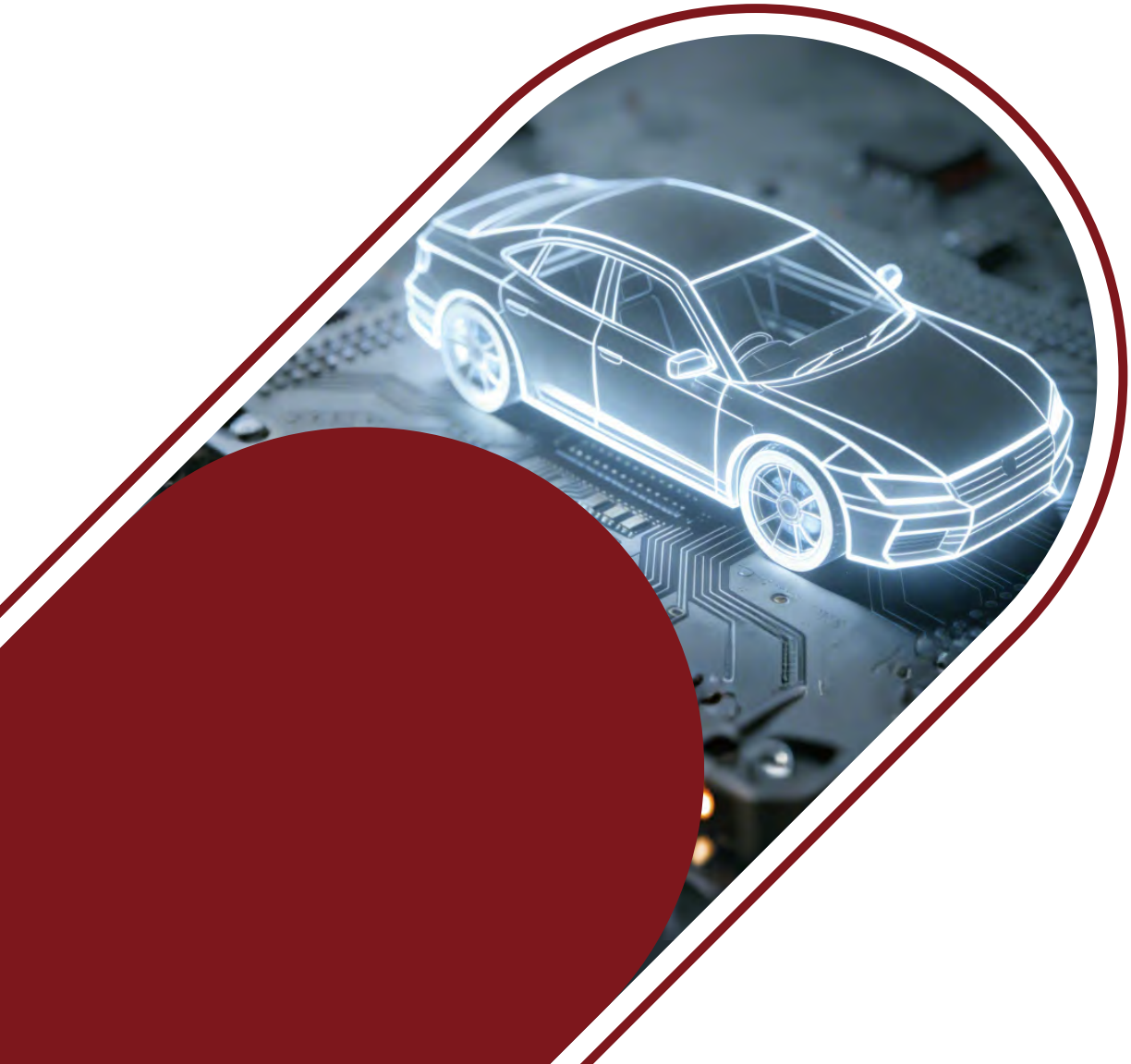
Automotive Products

JoulWatt provides various automotive products in highest level quality standard, which applied in complex application environments such as automotive and so on. A wide product portfolio provides engineers design flexibility in intelligent cockpit, ADAS, EV power and other automotive electronic applications. JoulWatt has wide automotive product categories including BUCK, BOOST, BUCK-BOOST, LDO, LED driver,gate driver, PMIC,Vcore power,and CAN interface



JWQ52993

6V/3A, 2MHz Syn. Buck

Key Features

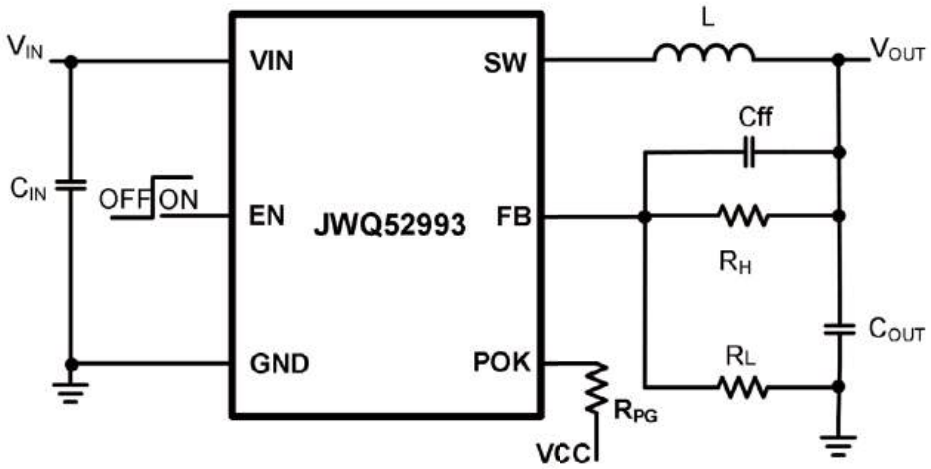
- AEC-Q100 Grade 1 Qualified
- 2.7V to 6V Operating Input Range
- 3A Output Current
- Optional 2A JW52992(P2P)
- Output Voltage as Low as 0.45V
- 1% FB Accuracy
- Very-Low R_{DS} for Good Thermal Performance
- High Efficiency at Light Load
- 2MHz Switching Frequency
- COT Control
- 100% Duty Cycle
- Power Good (PG)
- Output Discharge
- Internal Soft-Start
- Compact DFN1.5X1.5-6 Package

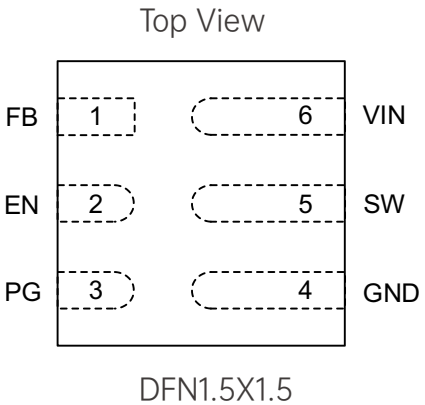
Benefits

- Wide Output Voltage Range (Support LDDR5 Applications)
- High Output Voltage Accuracy
- Good Thermal Performance
- High Efficiency
- Small Size

Application Fields

- ADAS
- Body Electronics and Lighting
- Infotainment and Cluster
- Hybrid, Electric, and Powertrain Systems





DFN1.5X1.5

JWQM93902

36V / 2A Power Module

Key Features

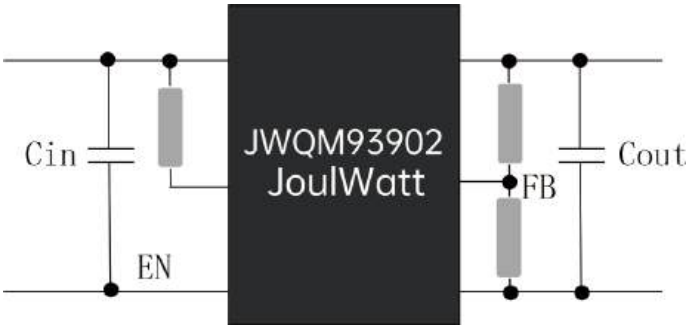
- AEC-Q104 Qualified
- 4V to 36V Wide Operating Input Range
- 2A Continuous Load Current
- 2.2MHz Switching Frequency
- Low Quiescent Current : 30uA
- Selectable PSM/FCCM at Light Load
- Built-In Spread-Spectrum Frequency Modulation for Low EMI
- Low Dropout Mode
- QFN4*5mm

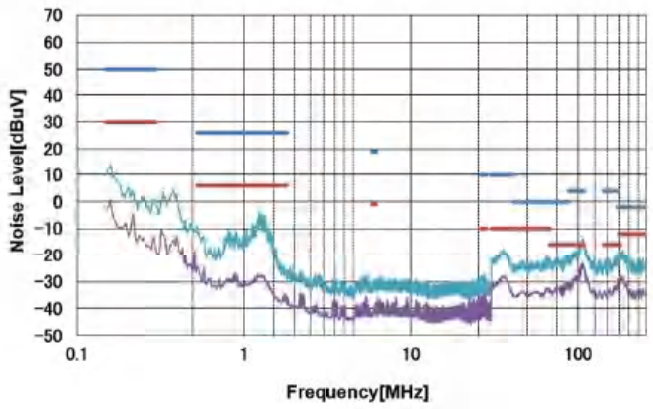
Benefits

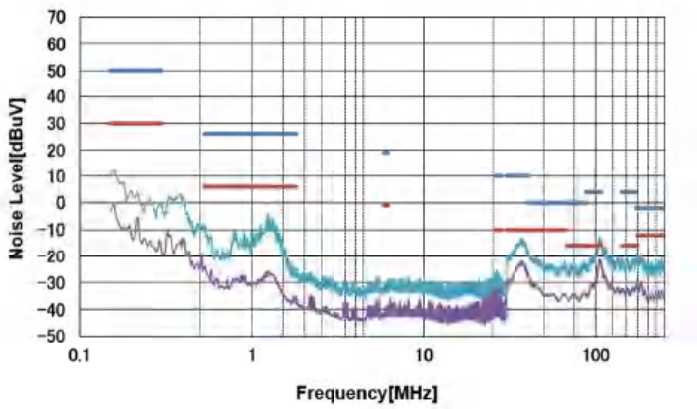
- Good EMI Performance
- Low IQ and Dropout
- Small Size

Application Fields

- Lamp Driver
- Cluster
- Camera
- Tbox







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Automotive Buck Converter

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Sync	Control Method	Package
JWQ5217	1	2.5~5.5	2	0.45	30	2000	Y	Internal	PFM	Y	COT	DFN2*2-8
JWQ52992	1	2.7~6	2	0.45	60	2000	Y	Internal	PFM	Y	COT	DFN1.5*1.5-6
JWQ5273	1	2.95~7	3	0.6	210	400~2400	Y	Adjustable	FCCM	Y	COT	QFN3*3-16
JWQ52993	1	2.7~6	3	0.45	60	2000	Y	Internal	PFM	Y	COT	DFN1.5*1.5-6
JWQ5276	1	2.95~7	6	0.6	210	400~2400	Y	Adjustable	FCCM	Y	COT	QFN3*3-16
JWQ5278	1	2.7~8	14	0.6	550	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-21
JWQ5279	1	2.7~8	20	0.6	550	700/800/1000	Y	Adjustable	FCCM	Y	COT	QFN3*4-21
JWQ5102AS	1	4~36	2	0.8	45	410	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5102BS	1	4~36	2	0.8	45	1000	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5102CS	1	4~36	2	0.8	45	2100	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5102CSF	1	4~36	2	0.8	45	2100	Y	Internal	FCCM	Y	PCM	QFN3*2-12
JWQ5103AS	1	4~36	3	0.8	45	410	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5103BS	1	4~36	3	0.8	45	1000	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5103CS	1	4~36	3	0.8	45	2100	Y	Internal	PFM	Y	PCM	QFN3*2-12
JWQ5103CSF	1	4~36	3	0.8	45	2100	Y	Internal	FCCM	Y	PCM	QFN3*2-12
JWQ5154	1	4~36	4	1	2.6	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWQ5155	1	4~36	5	1	2.6	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWQ5156	1	4~36	6	1	2.6	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWQ5157	1	4~36	7	1	2.6	200~2200	Y	Internal	PFM	Y	PCM	EVQFN4.0*3.5
JWQ5123	1	4.5~60	3.5	0.8	180	100~2000	N	Internal	PFM	N	PCM	ESOP8
JWQ5123B	1	4.5~60	3.5	0.8	180	100~1000	N	Internal	PFM	N	PFM/ Hiccup	ESOP8
JWQ5125	1	4.5~60	5	0.8	180	100~2000	N	Internal	PFM	N	PCM	ESOP8
JWQ5125B	1	4.5~60	5	0.8	180	100~1000	N	Internal	PFM	N	PFM/ Hiccup	ESOP8
JWQ5141	1	6~100	1	1.225	160	100~1000	N	Internal	PFM	Y	COT	ESOP8

Automotive Buck Controller

P/N	Topology	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	F_{SW} (kHz)	I_Q (uA)	Features	Package
JWQ6346A	Buck	6~75	0.8~Dmax·VIN	0.8	100~1000	600	Light Load Selectable(PFM/FCC) MOSFET Gate Driver Voltage Selectable(7.5V/10V)	QFN3.5*4.5-20

Automotive Boost Converter

P/N	Regulated Outputs	V_{IN} (V)	I_{OUT} (A)	$I_{Max.\ Switch\ Current}$ (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Soft Start	Light Load	Sync	Control Method	Package
JWQ5513	1	2.8~20	4~20	15	1	80	400~2000	Internal	PFM/PWM/ USM	Y	COT	QFN3*3*0.75-20

Automotive Boost Controller

P/N	Topology	V_{IN} (V)	V_{OUT} (V)	V_{FB}(V)	F_{SW} (kHz)	I_Q(uA)	Features	Package
JWQ5583	Boost, Flyback, Sepic	3~50	External	1.275	100~1000	1.5	Automotive Wide Input Non-synchronous Boost, SEPIC, Flyback Controller	MSOP10

Automotive Buck-boost Controller

P/N	Topology	V_{IN} (V)	V_{OUT} (V)	V_{FB}(V)	F_{SW} (kHz)	I_Q(uA)	Features	Package
JWQ3760	Buck-boost	5~60	1.2~60	1.2	180~400	3500	Automotive 60V 4-Switch Buck-boost Controller	QFN5*5-32
JWQ3760A	Buck-boost	5~60	1.2~60	1.2	180~400	3500	Automotive 60V 4-Switch Buck-boost Controller, Functional Safety ASIL D Capable For Automotive Applications	QFN5*5-32

Automotive Buck-boost Converter

P/N	V_{IN} (V)	V_{OUT} (V)	I_{OUT}(A)	V_{FB}(V)	F_{SW} (kHz)	I_Q(uA)	Output Default	Features	Package
JWQ3658	3.4~28(40 transient)	1~21	6	0.2~1	200~1000	380	Disabled	Automotive 4-Switch Buck-Boost Converter for USB Type C / PD	QFN4*5-21
JWQ3658C	3.4~28(40 transient)	1~21	6	0.2~1	200~1000	380	Enabled	Automotive 4-Switch Buck-Boost Converter with I2C Interface	QFN4*5-21

Automotive Isolated DC/DC

P/N	V_{IN} (V)	Topology	Max Power (W)	R_{DSON} (Ohm)	F_{SW} MAX (kHz)	Soft Start	Features	Package
JWQ3510	5~38	Flyback	6	0.5	350	Internal	Opto-Free, EN control	SOT23-5
JWQ3511	3.5~48	Flyback	6	0.44	400	Internal	Opto-Free, EN control	SOT23-5
JWQ3511S	3.5~48	Flyback	6	0.45	400	Internal	Opto-Free, EN control	SOT23-5
JWQ3511H	3.5~48	Flyback	6	0.45	620	Internal	Opto-Free, EN control	SOT23-5
JWQ3511HS	3.5~48	Flyback	6	0.45	620	Internal	Opto-Free, EN control	SOT23-5
JWQ3512	3.5~48	Flyback	6	0.45	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3512S	3.5~48	Flyback	6	0.45	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3512H	3.5~48	Flyback	6	0.45	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3512HS	3.5~48	Flyback	6	0.45	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3513	3.5~72	Flyback	10	0.44	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3513S	3.5~72	Flyback	10	0.44	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3513H	3.5~72	Flyback	10	0.44	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3513HS	3.5~72	Flyback	10	0.44	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3514	4.5~72	Flyback	24	0.43	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3514S	4.5~72	Flyback	24	0.43	400	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3514H	4.5~72	Flyback	24	0.43	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8
JWQ3514HS	4.5~72	Flyback	24	0.43	620	Internal & External	Opto-Free, EN control	EWDFN4*4-8

Automotive Power Module

P/N	Function	V_{IN} (V)	I_{OUT} (A)	V_{FB} (V)	I_Q (uA)	F_{SW} (kHz)	Power Good	Soft Start	Light Load	Isolated	Package
JWQM93902	Step-Down	4~36	2	0.8	45	2100	Y	Internal	PSM	N	QFN4*5*2-21
JWQM93902F	Step-Down	4~36	2	0.8	45	2100	Y	Internal	FCCM	N	QFN4*5*2-21
JWQM93905	Step-Down	4~36	5	0.8	11	2200	Y	Internal	PSM	N	LGA5*8*4.38

Automotive DrMOS

P/N	V_{IN} (V)	HS Current Limit(A)	Max FSW (kHz)	PWM Logic Voltage(V)	Features	Package
JWQ7065	3~16	75	1000	3.3	Compatible with Mainstream Controller	LGA5*6-38

Automotive Load Switch and USB Switch

P/N	Channel	V_{IN} (V)	Max I_{OUT} (A)	I_Q (uA)	Soft Start	Enable	Fault Indicator	Programmable Current Limit	OCP	Package
JWQ7101C	1	2.7~5.5	1.7	100	Internal	Active High	Y	Y	Y	SOT23-6

Automotive USB Charger

P/N	V_{IN} (V)	V_{OUT} (V)	I_{OUT} (A)	Structure	Support Apple MFI	Support Polarity Detect	Support Fault Detect	Protocol									Application	Package
								BC1.2 CDP	BC1.2 DCP	Apple 2.4A	SAM SUNG 2A	QC 2.0	QC 3.0	Type-C 3A	PD	SCP	UFCS		
JWQ4081C	4~25 (40V Transient)	5	3	Buck + Charge Controller	Y	N	Y	√						√				Automotive Head Unit Automotive Media Hub	EVQFN 4*4-22
JWQ4081P	4~25 (40V Transient)	5	3	Buck + Charge Controller	Y	Y	N	√						√				Automotive Head Unit Automotive Media Hub	EVQFN 4*4-22
JWQ4081D	4~25 (40V Transient)	5	3	Buck + Charge Controller	Y	N	N		√	√	√			√				Automotive USB Charger; Automotive Media Hub	EVQFN 4*4-22
JWQ4081Q	4~25(40V Transient)	5~12	3	Buck + Charge Controller	Y	N	N		√	√	√	√	√	√	√ (PD w/o PPS)			Automotive USB Charger; Automotive Media Hub	EVQFN 4*4-22
JWQ3119E	2.9~24	3.3~21	NA	Charge Controller	NA	Y	Y		√			√	√	√	√ (PD3.2 w/ AVS, PPS)	√	√	Automotive USB Charger; Automotive Media Hub	EVQFN 4*4-24

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Automotive High and Low Side Power Switch

P/N	Type	Channel	Input Withstand Voltage(V)	R_{DSON} (mohm@25C)	OCP(A)	Diagnosis	Package
JWQ71845	Hige Side	4	40	50	27	Open-load Detection, Short to Battery, Load Current Sense, OTP	HTSSOP-16
JWQ71910	Low Side	1	40	90	18	Open-load Detection，OTP	SOP8
JWQ71804S	High Side	1	35	4.5	117	Open-load Detection, Short to Battery, Load Current Sense, OTP	ETSSOP-14
JWQ71808S	High Side	1	35	8	72	Open-load Detection, Short to Battery, Load Current Sense, OTP	ETSSOP-14
JWQ71816S	High Side	1	35	16	46	Open-load Detection, Short to Battery, Load Current Sense, OTP	ETSSOP-14
JWQ71818SA	High Side	1	35	9	65	Open-load Detection, Short to Battery, Load Current Sense, OTP	ETSSOP-14

Automotive LED Linear Solution

P/N	MOS Channels	V_{IN} (V)	Max I_{OUT} (mA)	CAN/UART interface	Dimming	Constant Power	Operating Tempreture(℃)	Package
JWQ11711	1	4.5~40	500	N/A	PWM	Y	-40~125	EMSOP8
JWQ11724	24	4.5~40	150	Y	PWM	Y	-40~125	HTSSOP38

Automotive LDO

P/N	V_{IN} (V)	I_{OUT} (mA)	I_Q (uA)	Output Options	Features	Package
JWQ7806	2.2~5.5	300	11	Fixed Vout from 1.2~4.5	Enable, Thermal Shutdown, Current Limit, Low Noise, High PSRR, Low IQ	EWDFN2*2-6/SOT23-5/ X2DFN1*1-4
JWQ7806C	2.2~5.5	300	11	Fixed Vout from 1.2~4.5	Enable, Thermal Shutdown, Current Limit, Low Noise, High PSRR, Low IQ	SOT23-5
JWQ7809	2.2~5.5	500	11	Fixed Vout from 1.2~4.5	Enable, Thermal Shutdown, Current Limit, Low Noise, High PSRR, Low IQ	EWDFN2*2-6/SOT23-5
JWQ7821	2.2~5.5	1000	200	Adjustable	Enable, Thermal Shutdown, Current Limit, Low noise, High PSRR	DFN3*3-8
JWQ7821A	2.2~5.5	1000	100	Adjustable	Enable, Thermal Shutdown, Current Limit, Low noise, High PSRR	DFN3*3-8
JWQ7830A	2.7~20	300	32	Adjustable	Enable, Thermal Shutdown, Current Limit, Low noise, High PSRR	ESOP8
JWQ7841	4~40	150	15	Fixed 3.3/5	Thermal Shutdown, Current Limit, Low IQ, High PSRR	SOT223/SOT23-5
JWQ7843	3.2~40	300	17.5	Fixed 3.3/5	Enable, Thermal Shutdown, Current Limit, Low IQ, High PSRR	ESOP8/SOT223/SOT89-5
JWQ7853	3~40	300	17.5	Tracker from 2~14	Enable, Thermal Shutdown, Current Limit, Low IQ, High PSRR	ESOP8
JWQ78482	4.5~40	300	600	Adjustable	Dual Channel， Enable, Thermal Shutdown, Current Limit, Reverse Polarity Protection, Reverse Current Protection, Current Sense with Fault Indicator	HTSSOP16

Automotive Gate Driver

P/N	Channel	Configuration	Capacity (SRC/ SNK, A)	Supply Range(V)	Propagation Delay(ns)	Delay Match(ns)	Package
JWQ7924	2	Low-side	4.5/4.5	4.5~20	13	0.5	SOP8 / ESOP8

Automotive Amplifier

P/N	Channel	Vcc (V)	Rail-to-rail	Iq/channel (uA, Typ)	Input Bias Current (pA, Typ)	GBW (MHz, Typ)	Slew Rate (V/us, Typ)	Vos at 25C (mV, Max)	Vn (nV/rtHz, Typ)	Unit-gain Stable	Package
JWQ29001A	1	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	SOT23-5, SOT353, X2DFN
JWQ29002A	2	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	VDFN2*2-8,SOP8,MSOP8
JWQ29004A	4	1.8~5.5	In, Out	60	5	1	2.4	2	35 @ 1kHz	Y	TSSOP14,SOP14
JWQ29081	1	3~36	Out	680	10	3.5	15	0.5	30 @ 1kHz	Y	SOT23-5
JWQ29082	2	3~36	Out	680	10	3.5	15	0.5	30 @ 1kHz	Y	TSSOP8,SOP8,MSOP8
JWQ29084	4	3~36	Out	680	10	3.5	15	0.5	30 @ 1kHz	Y	SOP14
JWQ29262	2	2.5~5.5	In, Out	750	40	10	6	2	21 @ 1kHz	Y	SOP8,MSOP8
JWQ29264	4	2.5~5.5	In, Out	750	40	10	6	2	21 @ 1kHz	Y	TSSOP14
JWQ29286	2	3~36	Out	3000	80	10	8	4	33 @ 1kHz	Y	SOP8
JWQ29288	4	3~36	Out	3000	80	10	8	4	33 @ 1kHz	Y	SOP14

Automotive Comparators

P/N	Channel	Vcc (V)	Iq/channel (uA, Typ)	Input Bias Current (pA, Typ)	Vos @ 25C (mV, Typ)	Hysteresis (mV, Typ)	Tpd(ns) @20mV Overdrive	Tpd(ns) @100mV Overdrive	Rise Time (ns)	Fall Time (ns)	Output Type	Short-Circuit Current (mA, Typ)	Package
JWQ29021	1	1.8~5.5	60	14	2	0.6	47	42	7	5	Push	50	SOT23-5
JWQ29022	2	1.8~5.5	60	14	2	0.6	47	42	7	5	Push	±50	SOP8
JWQ29911	1	1.8~5.5	40	6	0.6	6	120	76	120	250	Open-drain	-45	SOT23-5
JWQ29912	2	1.8~5.5	40	6	0.6	6	120	76	120	250	Open-drain	45	SOP8
JWQ29914	4	1.8~5.5	40	6	0.6	6	120	76	120	250	Open-drain	-45	SOP14,TSSOP14
JWQ29982	2	2.4~5.5	1500	10	0.86	5	8	7.5	3	3	Push	160	SOP8
JWQ29901	1	2.5~36	130	1	±0.3	/	1400	/	/	/	Open-drain	50	SOP8,TSSOP8,MSOP8
JWQ29902	2	2.5~36	130	1	±0.3	/	1400	/	/	/	Open-drain	50	SOP8,TSSOP8,MSOP8
JWQ29904	4	2.5~36	130	1	±0.3	/	1400	/	/	/	Open-drain	50	SOP14

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Automotive Series Reference

P/N	Output Voltage (V)	Initial accuracy (Max) (%)	Temp coeff (Max @ -40~125) (ppm/C)	Noise (uVpp/V) 0.1 ~ 10 Hz	Long term Stability (typ)1st 1000 hr	VIN (V)(Max)	IQ (uA)(Typ)	Operating Temperature(℃)	Package
JWQ23318	1.8	0.05%	5	20	130	5.5	45	-55~135	SOT23-3
JWQ23320	2	0.05%	5	22	130	5.5	45	-55~135	SOT23-3
JWQ23325	2.5	0.05%	5	28	130	5.5	45	-55~135	SOT23-3
JWQ23330	3	0.05%	5	34	130	5.5	45	-55~135	SOT23-3
JWQ23333	3.3	0.05%	5	36	130	5.5	45	-55~135	SOT23-3
JWQ23340	4	0.05%	5	43	130	5.5	45	-55~135	SOT23-3
JWQ23345	4.5	0.05%	5	50	130	5.5	45	-55~135	SOT23-3
JWQ23350	5	0.05%	5	61	130	5.5	45	-55~135	SOT23-3

Automotive CAN

P/N	Feature	Data rate (Mbps)	Vcc (V)	VIO (V)	Loop Delay (ns, Typ)	Bus fault Protection (V)	RX Common Mode Voltage (V)	TDOM (ms, Typ)	BUS ESD (HBM) (kV)	BUS ESD (IEC-Contact)(kV)	Package
JWQ21042	5	4.5~5.5	3.0~5.5	148	± 70	± 30	5	± 16	± 15	Standby, VIO	SOP8
JWQ21042N	5	4.5~5.5	3.0~5.5	148	± 70	± 30	5	± 16	± 15	Standby	SOP8

Automotive MCU

P/N	CPU	Ma* Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	RAM (Byte)	Data Memery (Byte)	MOS/ LIN PHY	8/16/32 Timers	ADC	OPA	DAC	ACMP	VTS	UART	LIN	SPI	IIC	IW DG	RTC/ WT	Package
LCM32A039K8U8	32-Bit	72	1.8~5.5	64K	8K	-	-	6*16Bit、1*32Bit、1*24Bit	1*12Bit	4	1*10Bit	3	√	3	√	2	1	√	√	QFN32-5*5*0.75-P0.5
LCM32A039C8T8	32-Bit	72	1.8~5.5	64K	8K	-	-	6*16Bit、1*32Bit、1*24Bit	1*12Bit	4	1*10Bit	3	√	3	√	2	1	√	√	LQFP48-7*7*1.4-P0.5

Automotive Motor Control SoC

P/N	CPU	Ma* Operating Frequency (MHz)	Voltage Range (V)	Flash ROM (Byte)	RAM (Byte)	Data Memery (Byte)	Pre -driver	MOS	Pre-driver voltage (V)	LIN PHY	8/16/32 Timers	ADC	OPA	DAC	AC MP	VTS	UART	LIN	SPI	IIC	IW DG	RTC /WT	Package
LCA039BK32GU8	32-Bit	72	1.8~5.5	64K	8K	-	NN	-	6.5~20	-	6*16Bit、1*32Bit、1*24Bit	1*12Bit	4	1*10Bit	3	√	3	√	1	1	√	√	QFN32-5*5*0.75-P0.5
LCA039BC34GU8	32-Bit	72	1.8~5.5	64K	8K	-	NN+LDO	-	6.5~20	LIN PHY	6*16Bit、1*32Bit、1*24Bit	1*12Bit	4	1*10Bit	3	√	3	√	1	1	√	√	QFN48-7*7*0.75-P0.5
LCA067AK45LU8	32-Bit	72	2.0~5.5	64K	10K	1.5K	NN+LDO	6Pairs* NN: 400mΩ	5.5~28	LIN PHY	5*16Bit、1*24Bit	1*12Bit double -sampling	3	1*10Bit	2	√	2	√	1	1	√	√	QFN32-5*5*0.75-P0.5

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LED Lighting

JoulWatt offers a comprehensive range of LED lighting driver ICs,including linear and switching mode LED driver solutions. We also provide specialized products like integrated LED current ripple removers and tube lamp leakage protection solutions. Our portfolio supports diverse applications, from general and smart lighting to TRIAC dimming and high-power LED driver power supply requirements.

Non-isolated Switching Regulator

P/N	Topology	PF	HV-JFET	$R_{DS(ON)}$ (Ω)	Breakdown Voltage(V)	Power@ 175-264Vac	Power@ 90-264Vac	Dimming	COMP	OVP	CV/CC	Package
JW1606S	Boost	0.9	N	External	External	200W	180W	Y	External	Y	CC	SOP8
JW1965O	Boost	0.9	Y	External	External	200W	180W	N	Internal	Y	CC	SOP8
JW1965AC	Boost	0.9	Y	5.5	500	420V / 50mA	450V / 40mA	N	Internal	Y	CC	SOP7
JW1965DC	Boost	0.9	Y	3	500	420V / 60mA	420V / 50mA	N	Internal	Y	CC	SOP7
JW1965FC	Boost	0.9	Y	2.3	500	450V / 80mA	420V / 55mA	N	Internal	Y	CC	SOP7
JW1965BC	Boost	0.9	Y	1.8	600	450V / 80mA	450V / 60mA	N	Internal	Y	CC	SOP7
JW1965B1	Boost	0.9	Y	1.8	650	450V / 80mA	450V / 60mA	N	Internal	Y	CC	SOP7
JW19658B	Boost	0.9	Y	1.8	600	450V / 100mA	450V / 80mA	N	Internal	Y	CC	DIP7
JW19658C	Boost	0.9	Y	1	600	450V / 140mA	450V / 120mA	N	Internal	Y	CC	DIP7
JW19659B	Boost	0.9	Y	1.8	600	450V / 200mA	450V / 90mA	N	Internal	Y	CC	ESOP6
JW19659BC	Boost	0.9	Y	2	500	450V / 180mA	450V / 80mA	N	Internal	Y	CC	ESOP6
JW19667B	Boost	0.9	Y	5.5	500	420V / 70mA	450V / 35mA	N	Internal	Y	CC	SOP8
JW19667C	Boost	0.9	Y	3	500	420V / 80mA	420V / 40mA	N	Internal	Y	CC	SOP8
JW19667D	Boost	0.9	Y	2.3	500	420V / 90mA	420V / 45mA	N	Internal	Y	CC	SOP8
JW19667E	Boost	0.9	Y	2.1	500	420V / 110mA	420V / 50mA	N	Internal	Y	CC	SOP8
JW19667F	Boost	0.9	Y	1.5	500	420V / 120mA	420V / 55mA	N	Internal	Y	CC	SOP8
JW1813B	Buck-Boost	0.9	Y	1.8	600	100V / 300mA	80V / 300mA	N	Internal	Y	CC	SOP7
JW1967EH	Low-side Buck	0.9	Y	1.8	600	90V / 300mA	70V / 300mA	N	Internal	Y	CC	SOP7
JW1968O	Buck (Low&High)	0.9	Y	External	External	50W	50W	N	Internal	Y	CC	SOP8
JW1969O	Low-side Buck	0.9	Y	External	External	50W	40W	N	Internal	Y	CC	SOP8
JW1969A	Low-side Buck	0.9	Y	8.5	500	90V / 150mA	70V / 150mA	N	Internal	Y	CC	SOP7
JW1969A1	Low-side Buck	0.9	Y	8.5	500	90V / 150mA	70V / 150mA	N	Internal	Y	CC	SOP7
JW1969BC	Low-side Buck	0.9	Y	5.5	500	90V / 180mA	70V / 180mA	N	Internal	Y	CC	SOP7
JW1969B1	Low-side Buck	0.9	Y	5.5	500	90V / 180mA	70V / 180mA	N	Internal	Y	CC	SOP7
JW1969C	Low-side Buck	0.9	Y	3.2	500	90V / 200mA	70V / 200mA	N	Internal	Y	CC	SOP7
JW1969C1	Low-side Buck	0.9	Y	3.3	500	90V / 200mA	70V / 200mA	N	Internal	Y	CC	SOP7
JW1969DC	Low-side Buck	0.9	Y	2.3	500	90V / 250mA	70V / 250mA	N	Internal	Y	CC	SOP7
JW1969D1	Low-side Buck	0.9	Y	2.4	500	90V / 250mA	70V / 250mA	N	Internal	Y	CC	SOP7
JW1969DT	Low-side Buck	0.9	Y	2.5	650	90V / 250mA	70V / 250mA	N	Internal	Y	CC	SOP7
JW1969E	Low-side Buck	0.9	Y	1.5	500	90V / 330mA	70V / 330mA	N	Internal	Y	CC	SOP7
JW1969E1	Low-side Buck	0.9	Y	1.5	500	90V / 330mA	70V / 330mA	N	Internal	Y	CC	SOP7
JW1969EC	Low-side Buck	0.9	Y	1.8	500	90V / 300mA	70V / 300mA	N	Internal	Y	CC	SOP7
JW1969F	Low-side Buck	0.9	Y	2	500	90V / 280mA	70V / 280mA	N	Internal	Y	CC	SOP7
JW1969FC	Low-side Buck	0.9	Y	2	500	90V / 280mA	70V / 280mA	N	Internal	Y	CC	SOP7

JOULWATT

Non-isolated Switching Regulator

P/N	Topology	PF	HV-JFET	$R_{DS(ON)}$ (Ω)	Breakdown Voltage(V)	Power@ 175-264Vac	Power@ 90-264Vac	Dimming	COMP	OVP	CV/CC	Package
JW19698C	Low-side Buck	0.9	Y	3	500	90V / 240mA	70V / 240mA	N	Internal	Y	CC	DIP7
JW19698E	Low-side Buck	0.9	Y	1.8	500	90V / 330mA	70V / 330mA	N	Internal	Y	CC	DIP7
JW19698F	Low-side Buck	0.9	Y	2	500	72V / 400mA	54V / 400mA	N	Internal	Y	CC	DIP7
JW19698F1	Low-side Buck	0.9	Y	2	500	72V / 400mA	54V / 400mA	N	Internal	Y	CC	DIP7
JW1969CU	Low-side Buck	0.9	Y	4	600	90V / 180mA	70V / 180mA	N	Internal	Y	CC	SOP7
JW1969DU	Low-side Buck	0.9	Y	2.3	600	90V / 250mA	70V / 250mA	N	Internal	Y	CC	SOP7
JW1969EU	Low-side Buck	0.9	Y	1.8	600	90V / 300mA	70V / 300mA	N	Internal	Y	CC	SOP7
JW1969AB	Low-side Buck	0.9	Y	9.5	500	90V / 130mA	70V / 130mA	N	Internal	Y	CC	SOP7
JW1969BB	Low-side Buck	0.9	Y	6.5	500	90V / 180mA	70V / 180mA	N	Internal	Y	CC	SOP7
JW1969CB	Low-side Buck	0.9	Y	3.3	500	90V / 200mA	70V / 200mA	N	Internal	Y	CC	SOP7
JW1969DB	Low-side Buck	0.9	Y	2.3	500	90V / 240mA	70V / 240mA	N	Internal	Y	CC	SOP7
JW1969EB	Low-side Buck	0.9	Y	2.1	500	90V / 240mA	70V / 240mA	N	Internal	Y	CC	SOP7
JWB19673A	Low-side Buck	0.9	Y	13	650	80V / 100mA	/	N	Internal	Y	CC	ASOP7
JWB19673B	Low-side Buck	0.9	Y	7	650	80V / 150mA	/	N	Internal	Y	CC	ASOP7
JW19673C	Low-side Buck	0.9	Y	4.7	650	90V / 180mA	/	N	Internal	Y	CC	SOP7
JW19673C1	Low-side Buck	0.9	Y	3.7	650	90V / 210mA	/	N	Internal	Y	CC	SOP7
JW19673DT	Low-side Buck	0.9	Y	2.5	650	90V / 250mA	/	N	Internal	Y	CC	SOP7
JW19673D	Low-side Buck	0.9	Y	2.5	650	90V / 250mA	/	N	Internal	Y	CC	SOP7
JW19673D1	Low-side Buck	0.9	Y	2.5	650	90V / 250mA	/	N	Internal	Y	CC	SOP7
JW19673TU	Low-side Buck	0.9	Y	8	650	68V / 200mA	/	N	Internal	Y	CC	SOP7
JW196738C	Low-side Buck	0.9	Y	4.7	650	90V / 220mA	/	N	Internal	Y	CC	DIP7
JW196738D	Low-side Buck	0.9	Y	2.5	650	90V / 280mA	/	N	Internal	Y	CC	DIP7
JW196738D1	Low-side Buck	0.9	Y	2.5	650	90V / 280mA	/	N	Internal	Y	CC	DIP7
JW196738E	Low-side Buck	0.9	Y	1.5	650	90V / 380mA	/	N	Internal	Y	CC	DIP7
JWB19677A	Low-side Buck	0.7	Y	8.5	500	80V / 120mA	70V / 120mA	N	Internal	Y	CC	ASOP7
JWB19677BC	Low-side Buck	0.7	Y	5.5	500	90V / 150mA	70V / 150mA	N	Internal	Y	CC	ASOP7
JWB19677C	Low-side Buck	0.7	Y	3	500	90V / 200mA	70V / 200mA	N	Internal	Y	CC	ASOP7
JW19925N	Low-side Buck	0.5	Y	17	500	100V / 140mA	70V / 140mA	N	N	N	CC	SOP7
JW19925M	Low-side Buck	0.5	Y	13	500	100V / 200mA	70V / 200mA	N	N	N	CC	SOP7
JW19925A	Low-side Buck	0.5	Y	8	500	100V / 260mA	70V / 260mA	N	N	N	CC	SOP7
JW19925B	Low-side Buck	0.5	Y	6	500	100V / 300mA	70V / 300mA	N	N	N	CC	SOP7
JW19925C	Low-side Buck	0.5	Y	3	500	100V / 400mA	70V / 400mA	N	N	N	CC	SOP7

Non-isolated Switching Regulator

P/N	Topology	PF	HV-JFET	$R_{DS(ON)}$ (Ω)	Breakdown Voltage(V)	Power@ 175-264Vac	Power@ 90-264Vac	Dimming	COMP	OVP	CV/CC	Package
JWB1992S	Low-side Buck	0.5	Y	22	500	100V / 100mA	70V / 100mA	N	N	N	CC	ASOP7
JWB1992N	Low-side Buck	0.5	Y	17	500	100V / 120mA	70V / 120mA	N	N	N	CC	ASOP7
JWB1992M	Low-side Buck	0.5	Y	13	500	100V / 190mA	70V / 190mA	N	N	N	CC	ASOP7
JWB1992A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	N	N	N	CC	ASOP7
JWB1992B	Low-side Buck	0.5	Y	4.4	500	100V / 300mA	70V / 300mA	N	N	N	CC	ASOP7
JWB1995B	Low-side Buck	0.5	Y	17	500	100V / 110mA	70V / 110mA	N	N	N	CC	ASOP7
JW19957B	Low-side Buck	0.5	Y	17	500	100V / 110mA	70V / 110mA	N	N	N	CC	SOP7
JWB1995SB	Low-side Buck	0.5	Y	17	500	100V / 110mA	70V / 110mA	N	N	N	CC	TSSOP6
JW19975S	Low-side Buck	0.5	Y	22	500	100V / 100mA	70V / 100mA	N	N	N	CC	SOP7
JW19975N	Low-side Buck	0.5	Y	17	500	100V / 140mA	70V / 140mA	N	N	N	CC	SOP7
JW19975M	Low-side Buck	0.5	Y	13	500	100V / 200mA	70V / 200mA	N	N	N	CC	SOP7
JW19975A	Low-side Buck	0.5	Y	8	500	100V / 260mA	70V / 260mA	N	N	N	CC	SOP7
JW19975B	Low-side Buck	0.5	Y	6	500	100V / 300mA	70V / 300mA	N	N	N	CC	SOP7
JW19975C	Low-side Buck	0.5	Y	3	500	100V / 400mA	70V / 400mA	N	N	N	CC	SOP7
JW19976M	Low-side Buck	0.5	Y	13	500	100V / 220mA	70V / 220mA	N	N	N	CC	HSSOP6
JW19976A	Low-side Buck	0.5	Y	8	500	100V / 300mA	70V / 300mA	N	N	N	CC	HSSOP6
JW19976B	Low-side Buck	0.5	Y	4.4	500	100V / 500mA	70V / 500mA	N	N	N	CC	HSSOP6
JW19976C	Low-side Buck	0.5	Y	2.9	500	100V / 600mA	70V / 600mA	N	N	N	CC	HSSOP6
JWB1997S	Low-side Buck	0.5	Y	22	500	100V / 100mA	70V / 100mA	N	N	N	CC	ASOP7
JWB1997N	Low-side Buck	0.5	Y	17	500	100V / 120mA	70V / 120mA	N	N	N	CC	ASOP7
JWB1997M	Low-side Buck	0.5	Y	13	500	100V / 190mA	70V / 190mA	N	N	N	CC	ASOP7
JWB1997A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	N	N	N	CC	ASOP7
JW19982C	Low-side Buck	0.5	Y	2.9	500	100V / 400mA	70V / 400mA	EN/Code Dim	N	Y	CC	SOP8
JW19982D	Low-side Buck	0.5	Y	2.5	500	100V / 500mA	70V / 500mA	EN/Code Dim	N	Y	CC	SOP8
JW19982E	Low-side Buck	0.5	Y	2	500	100V / 600mA	70V / 600mA	EN/Code Dim	N	Y	CC	SOP8
JW19983N	Low-side Buck	0.5	Y	20	500	100V / 120mA	70V / 120mA	EN	N	Y	CC	SOP7
JW19983M	Low-side Buck	0.5	Y	13	500	100V / 190mA	70V / 190mA	EN	N	Y	CC	SOP7
JW19983AH	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	EN	N	Y	CC	SOP7
JW19983B	Low-side Buck	0.5	Y	6	500	100V / 300mA	70V / 300mA	EN	N	Y	CC	SOP7
JW19983BH	Low-side Buck	0.5	Y	5	500	100V / 350mA	70V / 350mA	EN	N	Y	CC	SOP7
JW19985M	Low-side Buck	0.5	Y	13	500	100V / 190mA	70V / 190mA	EN	N	Y	CC	SOP7
JW19985A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	EN	N	Y	CC	SOP7
JW19985B	Low-side Buck	0.5	Y	6	500	100V / 300mA	70V / 300mA	EN	N	Y	CC	SOP7

Non-isolated Switching Regulator

P/N	Topology	PF	HV-JFET	$R_{DS(ON)}$ (Ω)	Breakdown Voltage(V)	Power@ 175-264Vac	Power@ 90-264Vac	Dimming	COMP	OVP	CV/CC	Package
JW19987A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	EN	N	Y	CC	SOP7
JW19987B	Low-side Buck	0.5	Y	4.4	500	100V / 300mA	70V / 300mA	EN	N	Y	CC	SOP7
JW19887C	Low-side Buck	0.5	Y	2.9	500	100V / 400mA	70V / 380mA	EN	N	Y	CC	SOP7
JW19887C1	Low-side Buck	0.5	Y	3.2	500	100V / 400mA	70V / 380mA	EN	N	Y	CC	SOP7
JW19887C	Low-side Buck	0.5	Y	2.9	500	100V / 400mA	70V / 400mA	EN	N	Y	CC	SOP7
JW19987D	Low-side Buck	0.5	Y	2.5	500	100V / 500mA	70V / 500mA	EN	N	Y	CC	SOP7
JW19987E	Low-side Buck	0.5	Y	2	500	100V / 600mA	70V / 600mA	EN	N	Y	CC	SOP7
JW19988B	Low-side Buck	0.5	Y	4.4	500	100V / 300mA	70V / 300mA	EN	N	Y	CC	DIP7
JW19988C	Low-side Buck	0.5	Y	2.9	500	100V / 400mA	70V / 400mA	EN	N	Y	CC	DIP7
JW19988C1	Low-side Buck	0.5	Y	3.3	500	100V / 400mA	70V / 400mA	EN	N	Y	CC	DIP7
JW19988D	Low-side Buck	0.5	Y	2.5	500	100V / 500mA	70V / 500mA	EN	N	Y	CC	DIP7
JW19988E	Low-side Buck	0.5	Y	2	500	100V / 600mA	70V / 600mA	EN	N	Y	CC	DIP7
JW19989A1	Low-side Buck	0.5	Y	8	500	100V / 300mA	70V / 300mA	N	N	Y	CC	ESOP6
JW19989B1	Low-side Buck	0.5	Y	4.4	500	100V / 500mA	70V / 500mA	N	N	Y	CC	ESOP6
JW19989C1	Low-side Buck	0.5	Y	2.9	500	100V / 550mA	70V / 550mA	N	N	Y	CC	ESOP6
JW19989E -C250	Low-side Buck	0.5	Y	2	500	100V / 600mA	70V / 600mA	N	N	Y	CC	ESOP6
JW19967M	Low-side Buck	0.5	Y	13	530	100V / 190mA	70V / 190mA	N	N	Y	CC	SOP7
JW19967A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	N	N	Y	CC	SOP7
JW19967B	Low-side Buck	0.5	Y	5.5	550	100V / 300mA	70V / 300mA	N	N	Y	CC	SOP7
JW19967C	Low-side Buck	0.5	Y	3.5	500	100V / 350mA	70V / 350mA	N	N	Y	CC	SOP7
JW1996EG	Low-side Buck	0.5	Y	1.9	700	100V / 250mA	70V / 250mA	N	N	Y	CC	HSOP7
JW1996HG	Low-side Buck	0.5	Y	0.47	700	100V / 1A	70V / 1A	N	N	Y	CC	ESOP7
JW19966N	Low-side Buck	0.5	Y	17	500	100V / 120mA	70V / 120mA	N	N	Y	CC	HSSOP6
JW19966M	Low-side Buck	0.5	Y	13	500	100V / 150mA	70V / 150mA	N	N	Y	CC	HSSOP6
JW19966B	Low-side Buck	0.5	Y	4.4	500	100V / 300mA	70V / 300mA	N	N	Y	CC	HSSOP6
JW1994M	Low-side Buck	0.5	Y	13	500	100V / 180mA	70V / 180mA	N	N	Y	CC	SOP8
JW1994A	Low-side Buck	0.5	Y	8	500	100V / 240mA	70V / 240mA	N	N	Y	CC	SOP8
JW1994B	Low-side Buck	0.5	Y	5.5	500	100V / 300mA	70V / 300mA	N	N	Y	CC	SOP8
JW1994C	Low-side Buck	0.5	Y	2.8	500	100V / 400mA	70V / 400mA	N	N	Y	CC	SOP8
JW1994D	Low-side Buck	0.5	Y	1.8	500	100V / 500mA	70V / 500mA	N	N	Y	CC	DIP8
JW1994BL	Low-side Buck	0.5	Y	5.5	500	100V / 300mA	70V / 300mA	EN	N	Y	CC	SOP7

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Isolated Switching Regulator

P/N	Topology	PF	HV-JFET	R_{DSON} (Ω)	Breakdown Voltage (V)	Power @175-264Vac	Power @90-264Vac	Dimming	RTH	COMP	CV/CC	Package
JW1602	Flyback	0.9	N	External	External	100W	80W	PWM/ Analog	N	External	CC	SOP8
JW16033	Flyback	0.9	N	External	External	100W	80W	PWM	Y	External	CC	SOP8
JW1609	Flyback	0.9	N	External	External	100W	80W	N	N	External	CC	SOT23-6
JW16097	Flyback	0.9	N	External	External	100W	80W	N	N	External	CC	SOT23-6
JW16098	Flyback	0.9	N	External	External	100W	80W	N	N	External	CC	SOT23-6
JW1609E	Flyback	0.9	N	1.2	700	40W	25W	N	N	External	CC	DIP8
JW1680O	Flyback	0.9	Y	External	External	100W	80W	N	Y	Internal	CC	SOP8
JW16803O	Flyback	0.9	Y	External	External	100W	/	N	Y	Internal	CC	SOP8
JW1681O	Flyback	0.5	Y	External	External	100W	80W	N	N	External	CC	SOP8
JW16638D	Flyback	0.5	Y	2.1	650	40W	30W	N	N	External	CC	DIP7
JW16638F	Flyback	0.5	Y	1.5	650	50W	35W	N	N	External	CC	DIP7
JW16627GB	Flyback	0.5	Y	1	650	40W	/	N	N	Internal	CC	ESOP6
JW16627GC	Flyback	0.5	Y	0.62	700	50W	/	N	N	Internal	CC	ESOP6
JW16607M	Flyback	0.5	Y	24	650	8W	5W	N	N	N	CC	SOP7
JW16608F	Flyback	0.5	Y	1.8	650	40W	30W	N	N	N	CC	DIP7
JW1663O	Flyback	0.5	Y	External	External	100W	/	PWM	N	External	CC	SOP8
JW1630	LLC	0.5	Y	External	External	1KW@VIN=400Vdc		/	Y	External	CV/CC	SOP16

Linear Solution

P/N	MOS Channels	VIN (V)	Max IOUT (mA)	PF	Dimming	Constant Power	OTP	Package
JWB1981	1	230	100	>0.5	N	N	140	HSOP7
JWB1981S2	1	230	80	>0.5	N	N	150	HSSOP6
JWB1981S3	1	230	100	>0.5	N	N	150	HSSOP6
JWB1981S4	1	230	100	>0.5	N	N	150	HSSOP6
JWB1981S5	1	230	100	>0.5	N	N	150	HSSOP6
JWB1981S6	1	230	100	>0.5	N	N	150	HSSOP6
JW19812	2	230	100	>0.5	N	N	150	HSSOP6
JW19812JH	2	230	100	>0.5	N	N	150	HSSOP6
JW19813	1	230	100	>0.5	N	N	140	SOT89-3
JW19815C	1	230	100	>0.5	N	N	150	ESOT23-3
JW19815CH	1	230	100	>0.5	N	N	150	ESOT23-3
JW19818	1	230	100	>0.5	N	N	140	ESOP8
JW19818CT	1	230	80	>0.5	N	N	135	ESOP8
JW19819	2	230	100	>0.5	N	N	140	ESOP8
JW19819L	2	230	80	>0.5	N	N	140	ESOP8
JW19818C	1	230	100	>0.5	N	N	150	ESOP8
JW19818CH	1	230	100	>0.5	N	N	135	ESOP8
JW19818JH	1	230	100	>0.5	N	N	150	ESOP8
JW19828	1	120	300	>0.5	PWM, Analog, TRIAC	Y	150	ESOP8
JW1691H	1	230	150	>0.5	PWM, Analog, TRIAC	Y	150	SOT89-3 / TO252

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Linear Solution

P/N	MOS Channels	VIN (V)	Max IOUT (mA)	PF	Dimming	Constant Power	OTP	Package
JW16918	1	230	150	>0.5	EN	Y	150	ESOP8
JW16986	2	127/220	80	>0.7	N	Y	150	HSSOP6
JWB1698D	2	127/220	80	>0.7	N	Y	150	HSOP8
JWB19818L	2	120/220	100	>0.5	N	Y	150	HSOP8
JWB19816	2	220	300	>0.5	N	Y	150	HSOP8
JW198528	2	100-300	100	>0.7	N	Y	150	ESOP8
JW1985	3	100-300	100	>0.9	N	Y	145	ESOP8
JW19852	2	230	100	>0.9	N	Y	150	ESOP8
JW19852L	2	230	100	>0.9	N	Y	150	ESOP8
JW19853	3	100-300	100	>0.9	N	Y	120/135/150	ESOP8
JW19853C	3	100-300	80	>0.9	N	Y	150	ESOP8
JW19853CT	3	100-300	80	>0.9	N	Y	140	ESOP8
JW19857	3	230	120	>0.9	EN/Code Dim	Y	150	ESOP8
JW19858-C262	3	100-300	100	>0.9	N	Y	150	ESOP8
JWB1985	3	100-300	100	>0.9	N	Y	120/135/150	HSOP8
JW19836	4	120/220	100	>0.9	N	Y	150	ESOP16
JW1822O	1	120/220	500	>0.5	PWM, Analog	N	120/150	SOT23-6
JW18221	1	120/220	60	>0.5	PWM	N	120/150	ESOP8
JW18222	2	120/220	60	>0.5	PWM	N	120/150	ESOP8
JW1882	2	230	90	>0.5	ON/OFF CCT/DIM	Y	150	ESOP8
JW16925	1	230	90	>0.7	EN with 5V Aux Power	Y	150	ESOP8
JW16926	1	230	90	>0.5	PWM with 5V Aux Power	Y	150	ESOP8
JW16928	1	230	90	>0.7	PIR use with 5V Aux Power	Y	150	ESOP8

Dimmable Solution

P/N	Topology	MOSFET	VIN (V)	Power @175-264Vac	Power @90-140Vac	Dimming	COMP	OTP	Package
JW19876	Linear	Internal	120	-	130V / 50mA	TRIAC	N	135/150	ESOP8
JW19876C	Linear	Internal	120	-	130V / 50mA	TRIAC	N	135/150	ESOP8
JW19873	Linear	Internal	230	260V/30mA	-	TRIAC	N	150	ESOP8
JW18066M	BOOST	Internal	90~260	420V / 30mA	420V / 20mA	TRIAC	Internal	150	SOP8
JW1806M	BOOST	Internal	90~260	420V / 30mA	420V / 20mA	TRIAC	Internal	150	SOP8
JW1806A	BOOST	Internal	90~260	420V / 40mA	420V / 30mA	TRIAC	Internal	150	SOP8
JW1806AT	BOOST	Internal	90~260	420V / 40mA	420V / 30mA	TRIAC	Internal	130/150	SOP8
JW1806B	BOOST	Internal	90~260	420V / 50mA	420V / 40mA	TRIAC	Internal	150	SOP8
JW1806BT	BOOST	Internal	90~260	420V / 50mA	420V / 40mA	TRIAC	Internal	130/150	SOP8
JW1806C	BOOST	Internal	90~260	420V / 60mA	420V / 50mA	TRIAC	Internal	150	SOP8
JW1806DT	BOOST	Internal	90~260	420V / 70mA	420V / 60mA	TRIAC	Internal	130/150	SOP8

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Dimmable Solution

P/N	Topology	MOSFET	VIN (V)	Power @175-264Vac	Power @90-140Vac	Dimming	COMP	OTP	Package
JW1806EH	BOOST	Internal	90~260	420V / 70mA	420V / 60mA	TRIAC	Internal	150	SOP8
JW1806E	BOOST	Internal	90~260	420V / 90mA	420V / 50mA	TRIAC	Internal	150	SOP8
JW1807BHK	Flyback/BB	Internal	230	120V / 140mA	90V / 120mA	TRIAC	Internal	130/150	SOP8
JW1807CK	Flyback/BB	Internal	120	-	90V / 160mA	TRIAC	Internal	130/150	SOP8
JW1807CHK	Flyback/BB	Internal	230	120V/160mA	90V / 140mA	TRIAC	Internal	130/150	SOP8
JW1807EK	Flyback/BB	Internal	120	-	90V / 190mA	TRIAC	Internal	130/150	SOP8
JW1807EHK	Flyback/BB	Internal	230	120V/280mA	90V / 190mA	TRIAC	Internal	130/150	SOP8
JW1807K	Flyback/BB	External	120/230	50W	35W	TRIAC	Internal	130/150	SOP8
JW18287A	BUCK	Internal	90~260	100V / 240mA	70V / 240mA	PWM	Internal	150	SOP8
JW18287B	BUCK	Internal	90~260	100V / 300mA	70V / 300mA	PWM	Internal	150	SOP8
JW18287C	BUCK	Internal	90~260	100V / 400mA	70V / 400mA	PWM	Internal	150	SOP8
JW18287D	BUCK	Internal	90~260	100V / 500mA	70V / 500mA	PWM	Internal	150	SOP8
JW18287E	BUCK	Internal	90~260	100V / 600mA	70V / 600mA	PWM	Internal	150	SOP8
JW18288B	BUCK	Internal	90~260	100V / 400mA	70V / 400mA	PWM	Internal	150	DIP7
JW18288C	BUCK	Internal	90~260	100V / 500mA	70V / 500mA	PWM	Internal	150	DIP7
JW18288D	BUCK	Internal	90~260	100V / 600mA	70V / 600mA	PWM	Internal	150	DIP7
JW18288E	BUCK	Internal	90~260	100V / 700mA	70V / 700mA	PWM	Internal	150	DIP7
JW18285A	BUCK	Internal	90~260	100V / 240mA	70V / 240mA	PWM	Internal	150	SOP8
JW18285B	BUCK	Internal	90~260	100V / 300mA	70V / 300mA	PWM	Internal	150	SOP8
JW18285C	BUCK	Internal	90~260	100V / 400mA	70V / 400mA	PWM	Internal	150	SOP8
JW1828O	BUCK	External	90~260	150W	100W	PWM	Internal	150	SOP8
JW1829D	BUCK	External	90~260	150W	100W	PWM*2+IIC	Internal	150	SOP16
JW1829N	BUCK	External	90~260	150W	100W	PWM*3	Internal	150	SSOP10
JW1829S	BUCK	External	90~260	150W	100W	PWM+IIC	Internal	150	SSOP10

DC Input Lighting Product

P/N	V_{IN} (V)	Topology	Switch Current Limit	Frequency	Operation Mode	Dimming	Sync	Package
JW1120	4.5~20	Buck	1.7	1MHz	FCCM	PWM / Analog	Y	TSOT23-6
JW1123	4.5~28	Buck	2	600KHz	FCCM	PWM	Y	SOT23-6
JW1124	4.5~18	Buck	2	600KHz	FCCM	PWM	Y	SOT23-6
JW1125	4.5~28	Buck	2	1MHz	FCCM	PWM	Y	SOT23-6
JW1127	4.5~28	Buck+2CH LED Driver	2	1MHz	FCCM	PWM	Y	WDFN3*3-10
JW1130H	4.5~40	Buck / Boost / Buck-Boost	2	Constant 2us t_{off}	CCM+DCM	Analog	N	ESOP8 / SOT23-6
JW1136B	6~60	Buck	N	Tunable	CCM+DCM	PWM / Analog	N	ESOP8
JW1180O	6~80	Buck	N	Tunable	CCM+DCM	PWM	N(Controller)	SOP8
JW1180E	6~80	Buck	N	Tunable	CCM+DCM	PWM	N(200mR MOSFET Inside)	ESOP8
JW11A0	15~100	Buck	N	Tunable	CRM	N	N	ESOP8

Ripple Remover

P/N	MOS	V_{IN} (V)	Max I_{OUT} (A)	OVP/SCP	Dimming	COMP	OTP	Package
JW1221A	External	18~600	5	Hiccup	N	External	145	SOT23-6
JW1236A	Internal	16~65	0.5	Hiccup	N	Internal	150	SOT89-3 / TO252-2
JW1236B	Internal	16~65	1.8	Hiccup	N	Internal	150	TO252-2 / TO220-3
JW1251O	External	12~600	5	Hiccup	TRIAC / PWM/Analog	External	145	SOT23-6
JW1251A	External	18~60	0.5	Hiccup	TRIAC / PWM/Analog	External	145	ESOP8
JW1255O	External	12~400	5	Hiccup	TRIAC / PWM/Analog	Internal	145	SOT23-6
JW12555B	Internal	25~60	1.5	Hiccup	TRIAC / PWM/Analog	Internal	150	TO-252
JW12552B	Internal	25~60	1.5	Hiccup	TRIAC / PWM/Analog	Internal	150	TO-220-3
JW12557C	Internal	25~150	0.5	Hiccup	TRIAC / PWM/Analog	Internal	150	ESOP8
JW12558A	Internal	25~60	0.5	Hiccup	TRIAC / PWM/Analog	Internal	150	ESOP8
JW12558C	Internal	25~150	0.5	Hiccup	TRIAC / PWM/Analog	Internal	150	ESOP8
JW12558D	Internal	25~150	0.4	Hiccup	TRIAC / PWM/Analog	Internal	150	ESOP8
JWM362	Internal	40V	0.06	N	TRIAC / PWM/Analog	External	N	SOT23-3
JWM362H	Internal	60V	0.06	N	TRIAC / PWM/Analog	External	N	SOT23-3
JWM367	Internal	40V	0.06	N	TRIAC / PWM/Analog	External	N	SOT23-3
JWM367H	Internal	60V	0.06	N	TRIAC / PWM/Analog	External	N	SOT23-3
JWM368	Internal	40V	0.18	N	TRIAC / PWM/Analog	External	N	SOT89-3
JWM368H	Internal	60V	0.18	N	TRIAC / PWM/Analog	External	N	SOT89-3
JWM369	Internal	40V	0.24	N	TRIAC / PWM/Analog	External	N	SOT89-3
JWM369H	Internal	60V	0.24	N	TRIAC / PWM/Analog	External	N	SOT89-3
JWM3618	Internal	60V	0.04	N	TRIAC / PWM/Analog	External	N	SOT23-3

Electric Shock Protection IC

P/N	R_{DSON} (Ω)	Breakdown Voltage(V)	Power @175-277Vac	Power @90-277Vac	Detection Mode	Dimming	Package
JW1816	External	External	GFCI	Earth Leakage	Type A RMS	/	SOP8
JW1818O	External	External	100W	80W	Voltage	/	SOP8
JW1818B	1.8	600	50W	30W	Voltage	/	SOP8
JW1830D	1.9	600	70V/280mA	60V/280mA	Voltage	/	SOP8
JW1831D	1.9	600	70V/280mA	60V/280mA	Voltage	Trailing edge	SOP8
JW1832D	1.9	600	70V/280mA	60V/280mA	Voltage	Trailing edge	SOP8
JW1832O	External	External	30W	30W	Voltage	Trailing edge	SOP8

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