

A decorative horizontal bar composed of a thin top line and a larger block below it, both divided into five segments of varying shades of orange.

SELECTION GUIDE

DC/DC Converter Family

| Step-down Converter | | | | | | | | | | |
|---------------------|----------------------|---------|----------------------------|--------------------------|------------------------|---------------|-------------------------|---|-------------------------|-------------------|
| P/N | Package | Vin(V) | V _{FB} Typ.(V) | I _{out} (A) | I _q (uA) | Soft Start | Switching Freq (KHz) | Operation Mode | Protection Behaviour | Control Method |
| JW5231 | SOT23-5 SOT23-6 | 2.5~5.5 | 0.6 | 1.5 | 50 | Internal | 1500 | FCCM | Auto-recovery | PCM |
| New JW5224 | DFN2X3-8 | 2.5~5.5 | 0.6 | Dual- Channel 1.5A | 100 | Internal | 1500 | FCCM | Auto-recovery | PCM |
| New JW5222A | DFN2X2-8 | 2.5~5.5 | 0.6 | 2 | 60 | Internal | 2200 | PFM | Auto-recovery | PCM |
| New JW5250 | SOT23-5 SOT563 | 2.5~6 | 0.6 | 1 | 50 | Internal | 1500 | PFM | Auto-recovery | COT |
| JW5211 | SOT23-5 SOT23-6 | 2.5~6 | 0.6 | 1.2 | 40 | Internal | 1500 | PFM | Auto-recovery | PCM |
| JW5223 | SOT23-5 SOT23-6 | 2.5~6 | 0.6 | 2 | 40 | Internal | 1500 | PFM | Auto-recovery | PCM |
| New JW5252 | SOT23-5 SOT23-6 | 2.5~6 | 0.6 | 2 | 60 | Internal | 1000 | PFM | Auto-recovery | COT |
| JW5222 | SOT23-5 SOT23-6 | 2.5~6 | 0.6 | 2.5 | 60 | Internal | 1000 | PFM | Auto-recovery | PCM |
| New JW5222R | SOT23-5 SOT23-6 | 2.5~6 | 0.6 | 2.5 | 60 | Internal | 1000 | PFM | Latch-off | PCM |
| JW5213 | DFN2X2-8 | 2.5~6 | 0.6 | 3 | 60 | Internal | 1000 | PFM | Latch-off | PCM |
| JW5213A | DFN2X2-8 | 2.5~6 | 0.6 | 3 | 60 | Internal | 1000 | PFM | Auto-recovery | PCM |
| JW5033T | TSOT23-6 | 3.7~18 | 0.765 | 2 | 120 | Internal | 800 | PFM | Auto-recovery | PCM |
| JW5033S | TSOT23-6 SOT563-6 | 3.7~18 | 0.8 | 2 | 120 | Internal | 800 | PFM | Auto-recovery | PCM |
| JW5052S | TSOT23-6 | 3.7~18 | 0.6 | 2 | 120 | Internal | 800 | PFM | Auto-recovery | PCM |
| New JW5052C | SOT23-6 | 4.5~18 | 0.6 | 2 | 100 | Internal | 750 | PFM | Auto-recovery | PCM |
| JW5041T | TSOT23-6 TSOT23-8 | 4~18 | 0.765 | 2 | 220 | Internal | 800 | TSOT23-6: PFM TSOT23-8: Selectable | Auto-recovery | COT |
| New JW5041TF | TSOT23-6 | 4~18 | 0.765 | 2 | 220 | Internal | 800 | FCCM | Auto-recovery | COT |
| JW5040 | SOT563-6 TSOT23-6 | 3.8~18 | 0.8 | 3 | 120 | Internal | 500 | PFM | Auto-recovery | PCM |
| JW5060 | TSOT23-6 | 4~18 | 0.8 | 3 | 220 | Internal | 800 | PFM | Auto-recovery | COT |
| JW5060T | TSOT23-6 TSOT23-8 | 4~18 | 0.765 | 3 | 220 | Internal | 800 | TSOT23-6: PFM TSOT23-8: Selectable | Auto-recovery | COT |
| JW5060TF | TSOT23-6 | 4~18 | 0.765 | 3 | 220 | Internal | 800 | FCCM | Auto-recovery | COT |
| JW5062T | TSOT23-6 TSOT23-8 | 4~18 | 0.765 | 4 | 220 | Internal | 600 | PFM | Auto-recovery | COT |

| Step-down Converter | | | | | | | | | | | |
|---------------------|---------|-----------|--------|----------------------------|-------------------------|------------------------|---------------|-------------------------|-------------------|-------------------------|-------------------|
| | P/N | Package | Vin(V) | V _{FB} Typ.(V) | I _{out} (A) | I _q (uA) | Soft Start | Switching Freq (KHz) | Operation Mode | Protection Behaviour | Control Method |
| New | JW5073 | QFN3X3-20 | 4~20 | 0.6 | 6 | 60 | Internal | 500 | PFM | Auto-recovery | COT |
| New | JW5074 | QFN3X3-20 | 4~20 | 0.6 | 8 | 60 | Internal | 500 | PFM | Auto-recovery | COT |
| New | JW5075 | QFN3X3-20 | 4~20 | 0.6 | 10 | 60 | Internal | 500 | PFM | Auto-recovery | COT |
| | JW5025 | ESOP8 | 4.6~20 | 0.923 | 3 | 55 | Adjustable | 340 | PFM | Auto-recovery | PCM |
| | JW5031S | TSOT23-6 | 3.7~23 | 0.8 | 2 | 120 | Internal | 800 | PFM | Auto-recovery | PCM |
| | JW5022S | SOP8 | 4.5~24 | 0.923 | 2 | 50 | Internal | 500 | PFM | Auto-recovery | PCM |
| | JW5034 | TSOT23-6 | 4.7~24 | 0.8 | 2 | 100 | Internal | 570 | FCCM | Auto-recovery | PCM |
| | JW5057S | TSOT23-6 | 4~24 | 0.6 | 3 | 220 | Internal | 500 | PFM | Auto-recovery | COT |
| | JW5065 | TSOT23-8 | 4~24 | 0.8 | 3 | 220 | Internal | 450 | Selectable | Auto-recovery | COT |
| | JW5017S | SOT23-6 | 4.5~26 | 0.8 | 1.2 | 40 | Internal | 1200 | PFM | Auto-recovery | PCM |
| | JW5017F | SOT23-6 | 4.5~26 | 0.8 | 1.2 | 40 | Internal | 1200 | FCCM | Auto-recovery | PCM |
| | JW5017A | SOT23-6 | 4.5~26 | 0.8 | 1.2 | 40 | Internal | 750/1100 | FCCM | Auto-recovery | PCM |
| New | JW5068A | QFN3X3-20 | 4~26 | 0.6 | 8 | 60 | Internal | 500 | PFM | Latch-off | COT |
| New | JW5068B | QFN3X3-20 | 4~26 | 3.3 | 8 | 60 | Internal | 750 | PFM | Latch-off | COT |
| New | JW5068C | QFN3X3-20 | 5.5~26 | 5.1 | 8 | 60 | Internal | 750 | PFM | Latch-off | COT |
| New | JW5069A | QFN3X3-20 | 4~26 | 0.6 | 6 | 60 | Internal | 500 | PFM | Latch-off | COT |
| New | JW5069B | QFN3X3-20 | 4~26 | 3.3 | 6 | 60 | Internal | 750 | PFM | Latch-off | COT |
| New | JW5069C | QFN3X3-20 | 5.5~26 | 5.1 | 6 | 60 | Internal | 750 | PFM | Latch-off | COT |
| New | JW5079A | QFN3X3-20 | 4~26 | 0.6 | 10 | 60 | Internal | 500 | PFM | Latch-off | COT |
| New | JW5079B | QFN3X3-20 | 4~26 | 3.3 | 10 | 60 | Internal | 750 | PFM | Latch-off | COT |
| New | JW5079C | QFN3X3-20 | 5.5~26 | 5.1 | 10 | 60 | Internal | 750 | PFM | Latch-off | COT |
| | JW5018 | SOT23-6 | 4.7~40 | 0.8 | 0.6 | 40 | Internal | 2000 | PFM | Auto-recovery | PCM |
| | JW5018B | SOT23-6 | 4.7~40 | 0.8 | 0.6 | 40 | Internal | 800 | PFM | Auto-recovery | PCM |
| | JW5026 | SOT23-6 | 4.7~40 | 0.8 | 1 | 40 | Internal | 1100 | FCCM | Auto-recovery | PCM |
| | JW5015A | ESOP8 | 3.6~40 | 0.8 | 2 | 65 | Internal | 440 | PFM | Auto-recovery | PCM |
| | JW5116 | ESOP8 | 4.5~40 | 0.8 | 3 | 65 | Internal | Adjustable | PFM | Auto-recovery | PCM |

| Load Switch | | | | | | | | |
|---------------|-------------|-------------|-----------------|---------|------------|-------------|-----|---------------------|
| P/N | Vin Min (V) | Vin Max (V) | Iout (A) | Iq (uA) | Soft Start | Enable | OCP | Package |
| JW7110 | 2.5 | 5.5 | Dual-Channel 6A | 80 | External | Active High | N | DFN3X2-14 |
| JW7111 | 2.7 | 5.5 | Programmable | 100 | Internal | Active High | Y | SOT23-6 DFN2X2-6 |
| JW7111A | 2.7 | 5.5 | Programmable | 100 | Internal | Active Low | Y | SOT23-6 DFN2X2-6 |
| New JW7105 | 2.7 | 5.5 | Programmable | 100 | Internal | Active High | Y | SOT23-5 |
| New JW7105A | 2.7 | 5.5 | Programmable | 100 | Internal | Active Low | Y | SOT23-5 |
| JW7115 | 2.7 | 5.5 | 3 | 80 | Internal | Active High | Y | SOT23-5 |
| JW7115-1 | 2.7 | 5.5 | 1 | 80 | Internal | Active High | Y | SOT23-5 |
| New JW7115-2 | 2.7 | 5.5 | 2 | 80 | Internal | Active High | Y | SOT23-5 |
| New JW7115A | 2.7 | 5.5 | 3 | 80 | Internal | Active Low | Y | SOT23-5 |
| New JW7115A-1 | 2.7 | 5.5 | 1 | 80 | Internal | Active Low | Y | SOT23-5 |
| New JW7115A-2 | 2.7 | 5.5 | 2 | 80 | Internal | Active Low | Y | SOT23-5 |

AC/DC

| Synchronous Rectifier | | | | | |
|-----------------------|-------------------|------------|----------------------------|--------------------|---------|
| P/N | Breakdown Voltage | Rdson (mΩ) | Recommended Output Voltage | Recommended Output | Package |
| JW7700A | 40 | 15 | 5 | 2.4 | SOP8 |
| JW7700F | 40 | 4.5 | 5 | 4.2 | SOP8 |
| New JW7718A | 40 | 15 | 5 | 2.4 | SOP8 |
| JW7703D | 45 | 10 | 5 | 3.1 | SOP8 |
| JW7707A | 60 | 24 | 5~12 | 2 | SOP8 |
| JW7707C | 60 | 13 | 5~12 | 2.4 | SOP8 |
| JW7707D | 60 | 10 | 5~12 | 3.1 | SOP8 |
| JW7707F | 50 | 7 | 5 | 3.4 | SOP8 |
| JW7707K | 60 | 7 | 5~12 | 3.4 | SOP8 |
| New JW7719 | 100 | 20 | 5~20 | 3 | SOP8 |
| JW7715 | 80 | External | 3~12 | Up to 200W | SOT23-6 |
| JW7716 | 200 | External | 5~20 | Up to 200W | SOT23-6 |
| JW7705 | 60 | External | 5~12 | Up to 200W | SOT23-5 |
| New JW7717 | 500 | External | 3~20 | Up to 200W | SOP8 |

Primary-side Regulation

| P/N | Power Range (W) | Topology | Rdson (Ω) | CV/CC Regulation | fmax (KHz) | Cable Compensation | Standby Power (mW) | Package |
|---------|-----------------|----------|-----------|------------------|------------|--------------------|--------------------|---------|
| JW1501A | ≤12 | Flyback | 3.6 | ±5% | 70 | Y | <75 | SOP8 |
| JW1501B | ≤15 | Flyback | 2.1 | ±5% | 70 | Y | <75 | SOP8 |
| JW1502 | Up to 24W | Flyback | - | ±5% | 70 | Y | <75 | SOT23-6 |

LNB Power Supply

| P/N | Vin(Min) (V) | Vin(Max) (V) | Iout (A) | Vout(V) | Current Limit Selectable | 22kHz Tone Signal | Cable Compensation | Package |
|---------|--------------|--------------|----------|---------------------|--------------------------|-------------------|--------------------|----------|
| JW4002 | 8 | 14 | 0.55 | 14.2/19.3 | - | External | Y | ESOP8 |
| JW4002N | 8 | 14 | 0.55 | 13.5/18.5 | - | External | N | ESOP8 |
| JW4005 | 4.5 | 14 | 1 | 13.5/18.5/14.5/19.5 | Y | External | Y | ESOP8 |
| | | | | 13.5/18.5 | - | | N | TSOT23-6 |
| JW4005H | 4.5 | 14 | 0.6 | 14.1/19.2 | - | External | Y | TSOT23-6 |

DC/DC LED Driver

| P/N | Package | Topology | Frequency | Power | | Dimming | OCP/SCP |
|---------|------------------|---------------------------|-------------------------|--------|---------|------------|---------|
| | | | | Vin(V) | Iout(A) | | |
| JW1130H | ESOP8 SOT23-6 | Buck, Boost Buck-Boost | Contant 2us t of f time | 4.6~44 | 2A peak | PWM/Analog | Y |
| JW1120 | TSOT23-6 | Buck | 1MHz | 3.8~24 | 2 | PWM/Analog | Y |
| JW1129 | SOT23-6 | Buck | Contant 2us t of f time | 4.6~30 | 2A peak | PWM/Analog | Y |
| JW1121 | SOT23-6 | Buck | 1MHz | 4.5~28 | 1.5 | PWM/Analog | Y |

Single Inductor, Integrated Four-Switch Buck/Boost Converter

| P/N | Charging | Discharging | Bi-directional | Operation voltage Rang (V) | Fs (KHZ) | Current Programmable | Package |
|---------|----------|-------------|----------------|--------------------------------|----------|----------------------|-----------|
| JW3651 | N | Y | N | 3~20 | 500 | Y | QFN3X4-15 |
| JW3653A | Y | Y | Y | Adapter:4.2~20 Battery:3~20 | 500 | Y | QFN3X4-15 |
| JW3655A | Y | N | N | 4.2~20 | 500 | Y | QFN3X4-15 |

Power Bank Solution

| P/N | Charge Current (A) | Battery Voltage (V) | Charge Indicator | USB Switch | Load Auto.Detect | Iout/Pout | Package |
|--------|--------------------|---------------------|------------------|------------|------------------|-----------|-----------|
| JW3631 | 2.5 | 4.2/4.35 | Y | Y | Y | 3.1A | QFN4X4-24 |
| JW3633 | 2 | 4.2/4.35 | Y | Y | Y | 2.4A | QFN4X4-24 |

Battery Protection

New
New

| P/N | Voc(V) | V _{OCL} (V) | V _{UD} (V) | V _{UDH} (V) | V _{DOI1} (V) | V _{DOI2} (V) | V _{SHT} (V) | 0V charge function | Package |
|------------|--------|----------------------|---------------------|----------------------|-----------------------|-----------------------|----------------------|--------------------|---------|
| JW33110-AA | 4.25 | 4.05 | 2.8 | 3 | 0.07 | 0.16 | 0.8 | N | TSSOP24 |
| JW33110-AB | 4.3 | 4.1 | 2.3 | 2.7 | 0.055 | 0.16 | 0.4 | N | TSSOP24 |

Analog Front-End for Battery Management System

New

| P/N | Operation voltage (V) | Maximum cells | Voltage ADC accuracy (-40°C~85°C) | Current ADC accuracy (-40°C~85°C) | I _q | Support Cascade | Package |
|--------|-----------------------|---------------|-----------------------------------|-----------------------------------|---|-----------------|---------|
| JW3302 | 10~60 | 14 | ±15mV | ±500uV | 200uA@Low power mode 80uA@Standby mode | Y | LQFP48 |

Boost Converter

| P/N | V _{in} (V) | V _{out} (V) | Max. switch current (A) | P _{out} | Programmable output current | Package |
|--------|---------------------|----------------------|-------------------------|------------------------------|-----------------------------|-----------|
| JW5510 | 3~20 | 3~20 | 10 | 18W@VIN=3.2V 30W@VIN=6.4V | Y | QFN3X4-15 |

Bi-Directional Relay Driver

New

| P/N | V _{in} (Min) (V) | V _{in} (Max) (V) | Driving Current Typ(A) | I _q (uA) | Package |
|--------|---------------------------|---------------------------|------------------------|---------------------|--------------|
| JW7901 | 4 | 36 | 0.3 | ≤1 | SOP8,SOT23-6 |