

- Analog Signal Chain
- Power Management
- Embedded Processors

# Devices To Design

## Welcome

This is the first edition of 3PEAK's Devices To Design newsletter, where we highlight our latest IC innovations! We are excited to detail how our performance devices support your application-specific needs and can take your design specs to the next level.

## New to 3PEAK?

3PEAK is a global semiconductor supplier focused on the development of Analog and Embedded Integrated Circuits. We are committed to the research and development of high-performance, high-quality, and highly reliable integrated circuit products to provide customers with all-around solutions. Our products are targeted for industrial, automotive, and communication applications, as well as providing more than 40,000 IC alternatives to other semiconductor suppliers. We partner with top-tier wafer fabs located in all major regions to manufacture our products, giving our customers quality, supply chain security, and cost savings.

Power Management

## TPL8032

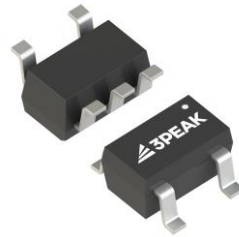
Available in SOT-23-5

### LDO Regulator

High-PSRR, Ultra-Low Noise

#### Features:

- Vin: 2.5V to 20V
- Adjustable: 1.22V to 18V Fixed 1.5V to 5V
- 300mA Max Iout
- 5.68μVRMS Vout Noise
- Low Dropout: 550mV Max at 300mA
- High PSRR: 79dB at 1kHz, 56dB at 100kHz



#### Applications:

- Low-Noise Power Supply
- High-Definition Imaging
- Infrared Image Equipment
- Medical Equipment

TPL8032 Quick Links

[Product Page](#) | [Datasheet](#) | [Buy on DigiKey](#)

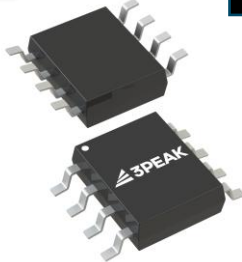
Available in SOP-8

## TPA9151

Analog Signal Chain

#### Applications:

- Current Sense
- Battery Voltage Monitor
- Industrial Control



### Unity-Gain Difference Amplifier

±275 Common Mode Voltage

#### Features:

- ±1mV offset (max)
- Offset Voltage Drift 2uV/°C
- On Chip Resistors for Gain Error 0.03% Max
- EMI Enhancement
- -40°C to +125°C Operation Temp Range

TPA9151 Quick Links

[Product Page](#) | [Datasheet](#) | [Buy on DigiKey](#)

Power Management

## TPQ05100

Available in WLCSP, DFN2X2-6

### Synchronous Step-up Regulator

600mA, 0.9V - 5.5V Vin

#### Features:

- 260nA Ultra-Low IQ into Vout Pin
- 40nA Ultra-Low IQ into Vin Pin
- Typical 0.8A Switch Peak Current Limit
- True Disconnect During Shutdown
- 96% Efficiency from 10mA to 300mA Load



#### Applications:

- Battery Powered Devices
- Battery Powered Wearable
- Fiber Optical Modules
- Internet of Things Devices
- Battery Powered Meters

TPQ05100 Quick Links

[Product Page](#) | [Datasheet](#) | [Buy on DigiKey](#)

Want to connect with 3PEAK or get product samples? **Contact our teams!**

- Analog Signal Chain
- Power Management
- Embedded Processors

[See our list of Sales Representatives](#)

[See our list of Global Distributors](#)

Power Management

## TPT1042V0

Available in DFN3X3-8L, SOP8

### CAN FD Transceiver

Fault Protected High-Speed with Standby Mode

**Features:**

- Bus Fault Protection  $\pm 70V$
- CAN FD Data Rates to 5Mbps
- Common-Mode Input Voltage:  $\pm 30V$
- IEC 61000-4-2 ESD Protection up to  $\pm 15kV$
- Meets ISO 11898-2:2016 and SAE J2284-1 to SAE J2284-5 Physical Layer Standards



**Applications:**

- All Devices Supporting Loaded CAN Networks
- Field Industrial Automation
- Sensor and Driver Systems
- Building, Security Control Systems
- Energy Storage Systems
- Telecom Base Station Status and Control

[TPT1042V Quick Links](#)

[Product Page](#) | [Datasheet](#) | [Buy on DigiKey](#)

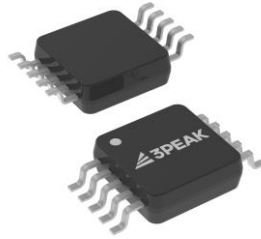
Available in MSOP10

## TPC5180

Analog Signal Chain

**Applications:**

- Data Acquisitions
- Specialty Instruments
- Industry Measurement and Control
- Medical Equipment
- Automatic Test Equipment



**18-Bit SAR Precision ADC**  
Fully Differential Inputs, 300KSPS

**Features:**

- NO Missing Codes 18-Bit SAR up to 300KSPS
- Unipolar, Differential Analog Input -VREF to VREF
- High Linearity: DNL  $\pm 0.6LSB$ , INL  $\pm 2LSB$
- THD:  $-110dB$
- Analog Input CMRR 84dB at 1kHz
- SPI compatible, Daisy-Chain is supported

[TPC5180 Quick Links](#)

[Product Page](#) | [Datasheet](#) | [Buy on DigiKey](#)

Power Management

## TPR50

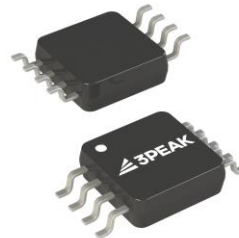
Available in MSOP8, SOP8

### Precision Voltage Reference

Low Noise, Low-Drift, 17 Orderable Options

**Features:**

- Low Temperature Coefficient; 2.5ppm/ $^{\circ}C$  from  $-40^{\circ}C$  to  $+125^{\circ}C$
- High Initial Accuracy: 0.05% Maximum
- Low Noise: 3uVpp/V from 0.1Hz to 10Hz
- Sink and Source up to  $\pm 10mA$
- PSRR 80dB at 1kHz



**Applications:**

- Battery Test Equipment
- Industry Control
- Precision Instrumentation
- Medical Equipment

[TPR50 Quick Links](#)

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