

- 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 designs specs to 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
- 5.68- μ V RMS 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](#)

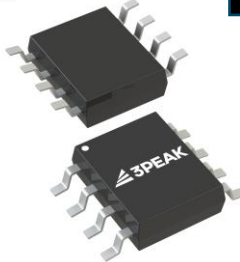
Available in SOP-8

TPA9151

Analog Signal Chain

Applications:

- Current Sense
- Battery Voltage Monitor
- Industrial Control



Unity-Gain Difference Amplifier ± 275 Common Mode Voltage

Features:

- ± 1 mV offset (max)
- Offset Voltage Drift 2 μ V/ $^{\circ}$ C
- On Chip Resistors for Gain Error 0.03% Max
- EMI Enhancement
- -40 $^{\circ}$ C to +125 $^{\circ}$ 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](#)

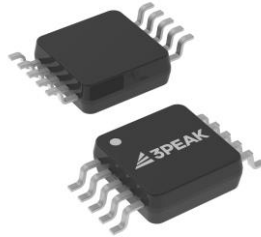
Available in MSOP10

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

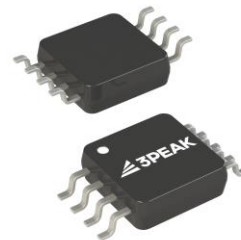
Available in MSOP8, SOP8

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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