



The Future of Analog IC Technology

# MP4832A

## 32-Channel High Voltage Analog Switch With Output Bleed Resistors

**PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE**

### DESCRIPTION

The MP4832A is a 32-channel high voltage single-pole single-throw, SPST, analog switch with integrated output bleed resistors designed for medical ultrasound imaging applications. It is designed to multiplex the transmit and receive voltages to and from multiple piezoelectric transducers, PZTs.

The output switches are controlled by a 32-bit serial shift register followed by a 32-bit data latch. A data out, Dout, pin is provided to allow for multiple devices to be cascaded together. This will help minimize the number of input/output, I/O, control lines. A logic High in the data latch will turn on the corresponding analog switch whereas a logic Low will turn it off.

The MP4832A does not require any high voltage supplies. Only two low voltage supplies are required, 3.3V and 10V. The analog switch can block or pass analog voltages up to  $\pm 90V$  with peak currents of up to  $\pm 2.0A$ . The MP4832A is available in QFN 72-pin 10mm x 10mm package.

### FEATURES

- No High Voltage Supplies Required
- 32 Channels
- Up to  $\pm 90V$  Analog Signals
- 14 Ohms Typical Switch Resistance
- $\pm 2.0A$  Typical Switch Peak Current
- Off-Isolation of -60dB at 5.0MHz
- Integrated Output Bleed Resistor
- 80MHz Clock Frequency
- Available in 72-pin 10x10mm QFN Package.

### APPLICATIONS

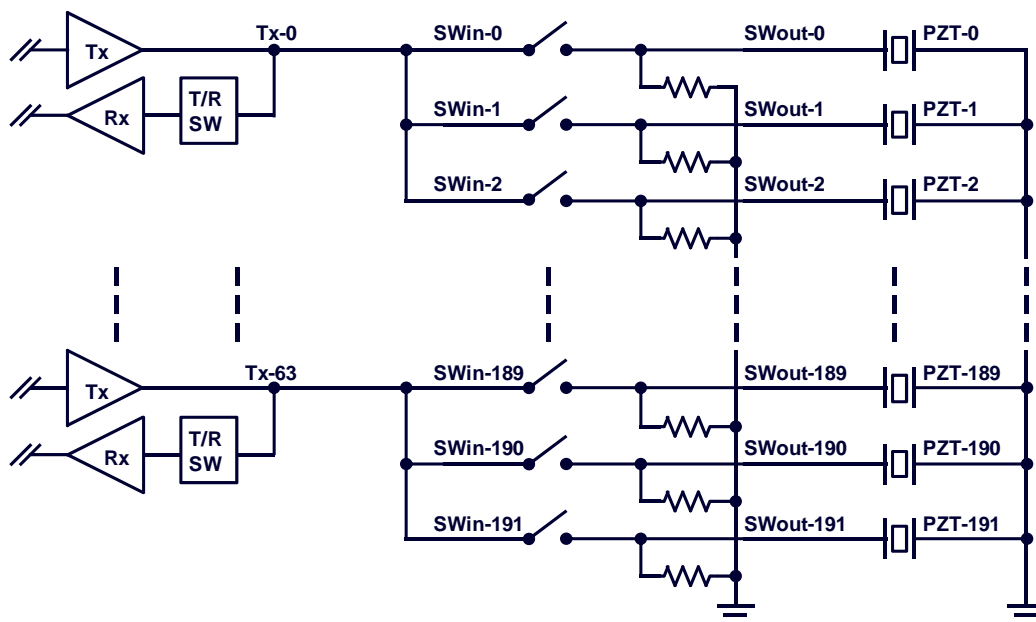
- Medical Ultrasound Imaging
- NDT, Non-Destructive Testing

All MPS parts are lead-free, halogen free, and adhere to the RoHS directive. For MPS green status, please visit MPS website under Quality Assurance.

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Please email "[ultrasoundproducts@monolithicpower.com](mailto:ultrasoundproducts@monolithicpower.com)" for more information

### TYPICAL APPLICATION



## ORDERING INFORMATION

Part Number*	Package	Top Marking
MP4832AGRD	QFN-72 (10mm x 10mm)	See Below

\* For Tape & Reel, add suffix -Z (e.g. MP4832AGRD-Z).

## TOP MARKING

**MPSYYWW**  
**MP4832A**  
**LLLLLLLLLL**

MP4832A: product code of MP4832AGRD;

MPS: MPS prefix;

YY: year code;

WW: week code;

LLLLLLLLLL: lot number;

## PACKAGE REFERENCE

