MP4816A

16-Channel High Voltage Analog Switch With Output Bleed Resistors

The Future of Analog IC Technology

PRELIMINARY SPECIFICATIONS SUBJECT TO CHANGE

DESCRIPTION

The MP4816A is a 16-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 16-bit serial shift register followed by a 16-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 MP4816A 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 ±90V with peak currents of up to ±2.0A.

The MP4816A is available in TQFP 48-pin7mm x 7mm package.

FEATURES

- No High Voltage Supplies Required
- 16 Channels
- Up to ±90V Analog Signals
- 12.5 Ω Typical Switch Resistance
- ±2.0A Typical Switch Peak Current
- Off-Isolation of -60dB at 5.0MHz
- Integrated Output Bleed Resistor
- 80MHz Clock Frequency

APPLICATIONS

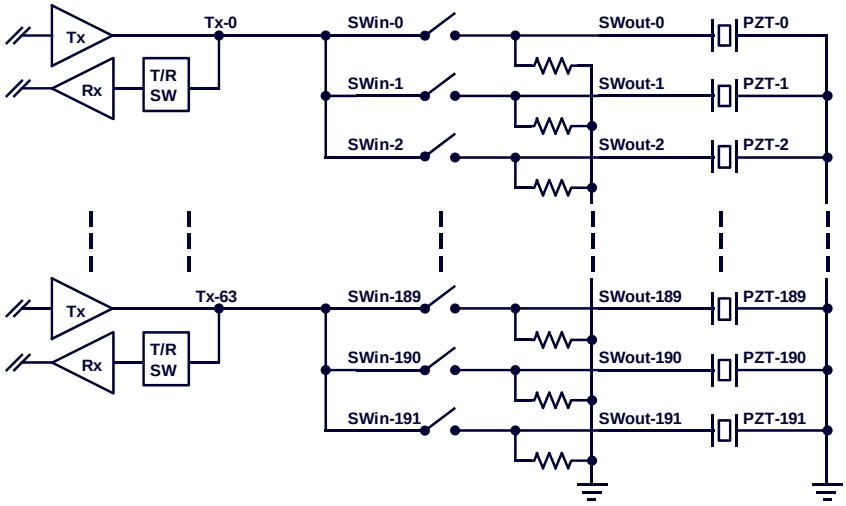
- Medical Ultrasound Imaging
- NDT, Non-Destructive Testing

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

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TYPICAL APPLICATION



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ORDERING INFORMATION

Part Number*	Package	Top Marking
MP4816AGFP	TQFP-48 (7mm x 7mm)	*See Below*

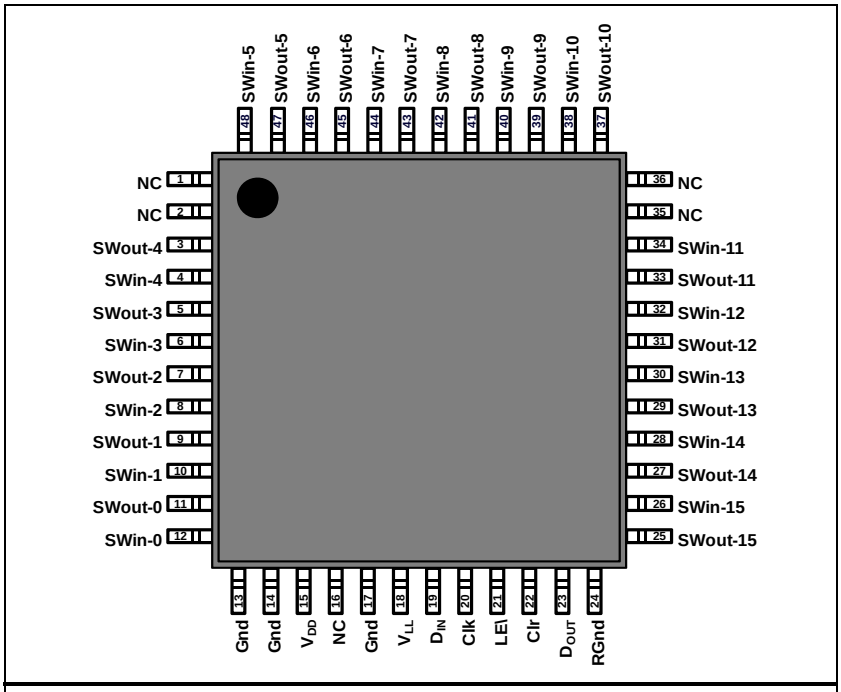
* For Tape & Reel, add suffix –Z (e.g. MP4816AGFP–Z).

TOP MARKING

MPSYYWW
MP4816A
LLLLLLLLL

MP4816A: product code of MP4816AGFP;
MPS: MPS prefix:
YY: year code;
WW: week code:
LLLLLLLLL: lot number;

PACKAGE REFERENCE



TQFP-48 (7mm x 7mm)

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