

MX856 / MX857

Single Driver for GaAs FET
Switches and Attenuators

Features

- CMOS Technology
- TTL/CMOS compatible inputs
- Low switching noise
- 5nS typical true / complement output skew
- 5nS typical output rise and fall times
- Up to 20V output voltage
- Output high voltage programmable via V_{OPT}
- Output low voltage programmable via V_{EE}

Applications

- Digital control of analog circuits
- Level shifting and amplification
- Circuit applications requiring complementary signal generation with low skew
- Bias control for PIN diode drivers in a microwave switch

General Description

The MX856 and MX857 are high speed single channel level shifters with complimentary output drivers. The MX856 features a 5.0V V_{CC} positive supply, and the MX857 features a 3.3V V_{CC} positive supply.

The input buffers accept digital TTL or CMOS level signals, amplifies them to the V_{CC} and GND supply rails, and generates complementary outputs. The translator level shifts these output signals by amplifying them to the V_{CC} and V_{EE} supply rails.

The output drivers then buffer the signals to V_{OPT} and V_{EE} . V_{OPT} may be set within the range of V_{CC} and GND. The output drivers also adjust the complimentary signals for minimized skew error.

The MX856 and MX857 are designed to operate over a temperature range of -40°C to +85°C, and are available as die in wafer form, die in waffle pack, 8 lead SOIC package, and SOIC on Tape and Reel.

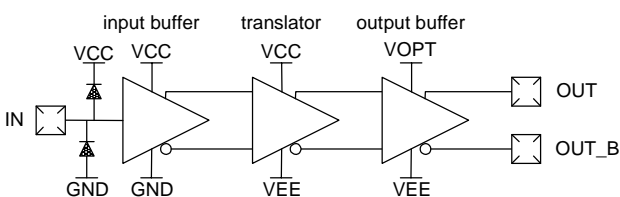
Ordering Information MX856

Part No.	Description	Qty
MX856B	8 Lead SOIC Tube	100
MX856BTR	SOIC on Tape & Reel	1000

Ordering Information MX857

Part No.	Description	Qty
MX857B	8 Lead SOIC Tube	100
MX857BTR	SOIC on Tape & Reel	1000

Functional Block Diagram



8 Lead SOIC Configuration

