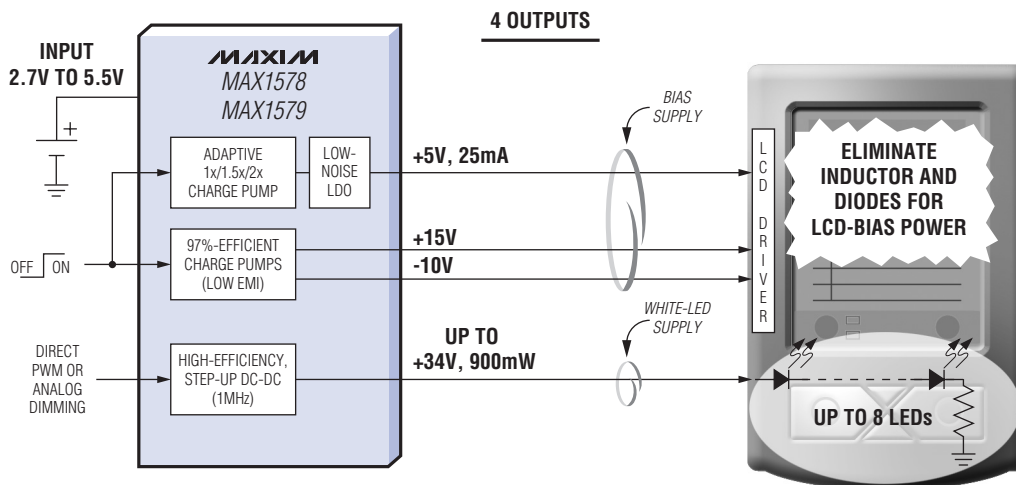


FIRST COMPLETE LCD-BIAS AND WHITE-LED BACKLIGHT SUPPLIES FOR SMALL TFT DISPLAYS

Uses Only One Inductor and No Charge-Pump Diode

The MAX1578/MAX1579 have four regulated outputs to provide all the voltages required for small, active-matrix, thin-film transistor (TFT) LCDs in handheld devices where minimum external components and high efficiency are important. Both devices integrate three advanced charge pumps to provide fixed +5V, +15V, and -10V for the LCD-bias circuit, plus a 34V step-up DC-DC to drive up to eight white LEDs in series. The charge pumps require only ceramic capacitors and no external diodes. All outputs are sequenced during startup and shutdown. During shutdown, the outputs are disconnected and actively discharged to zero. The MAX1579 features temperature compensation to avoid overdriving the LEDs at higher temperatures.

COMPLETE TFT-LCD SUPPLY (BIAS AND WHITE LED)



- ◆ Four Regulators in One Package
- ◆ Compact, 4mm x 4mm, Thin QFN Package
- ◆ Soft-Start with Zero In-Rush Current
- ◆ Low 15mV_{p-p} Input Ripple
- ◆ Overvoltage Protection on White-LED Output
- ◆ Priced at \$3.50[†]
- ◆ Evaluation Kit Available

[†]1000-up recommended resale. Prices provided are for design guidance and are FOB USA. International prices will differ due to local duties, taxes, and exchange rates. Not all packages are offered in 1k increments, and some may require minimum order quantities.

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