



FSA3230 — High-Speed USB2.0 / Mobile High-Definition Link (MHL™) with Negative Swing Audio

Features

- Low On Capacitance: 6 pF / 6 pF MHL / USB (Typical)
- Low Power Consumption: 30 μ A Maximum
- Supports MHL Rev. 2.0
- MHL Data Rate: 4.0 Gbps
- Audio Swing: -1.5 V to +1.5 V (Typical)
- V_{BUS} Powers Device with No V_{CC}
- Packaged in 16-Lead UMLP (1.8 x 2.6 mm)
- Over-Voltage Tolerance (OVT) on all USB Ports, Up to 5.25 V without External Components

Applications

- Cell Phones and Digital Cameras

Description

The FSA3230 is a bi-directional, low-power, high-speed, 3:1, USB2.0, MHL™ and audio switch. Configured as a double-pole, triple-throw (DP3T) switch, it is optimized for switching between high- or full-speed USB, Mobile High-Definition Link sources (per MHL Rev. 2.0 specification) and negative swing capable audio. A Single-Pole, Double-Throw (SPDT) switch is provided for ID. This ID switch provides path to support On-The-Go (OTG) communication for the USB Path OR CBUS for the MHL Path.

The FSA3230 contains special circuitry on the switch I/O pins, for applications where the V_{CC} supply is powered off (V_{CC}=0), that allows the device to withstand an over-voltage condition. This switch is designed to minimize current consumption even when the control voltage applied to the control pins is lower than the supply voltage (V_{CC}). This is especially valuable in mobile applications, such as cell phones; allowing direct interface with the general-purpose I/Os of the baseband processor. Other applications include switching and connector sharing in portable cell phones, digital cameras, and notebook computers.

Ordering Information

Part Number	Top Mark	Operating Temperature Range	Package
FSA3230UMX	LK	-40 to +85°C	16-Lead, Ultrathin Molded Leadless Package (UMLP), 1.8 x 2.6 mm

Physical Dimensions

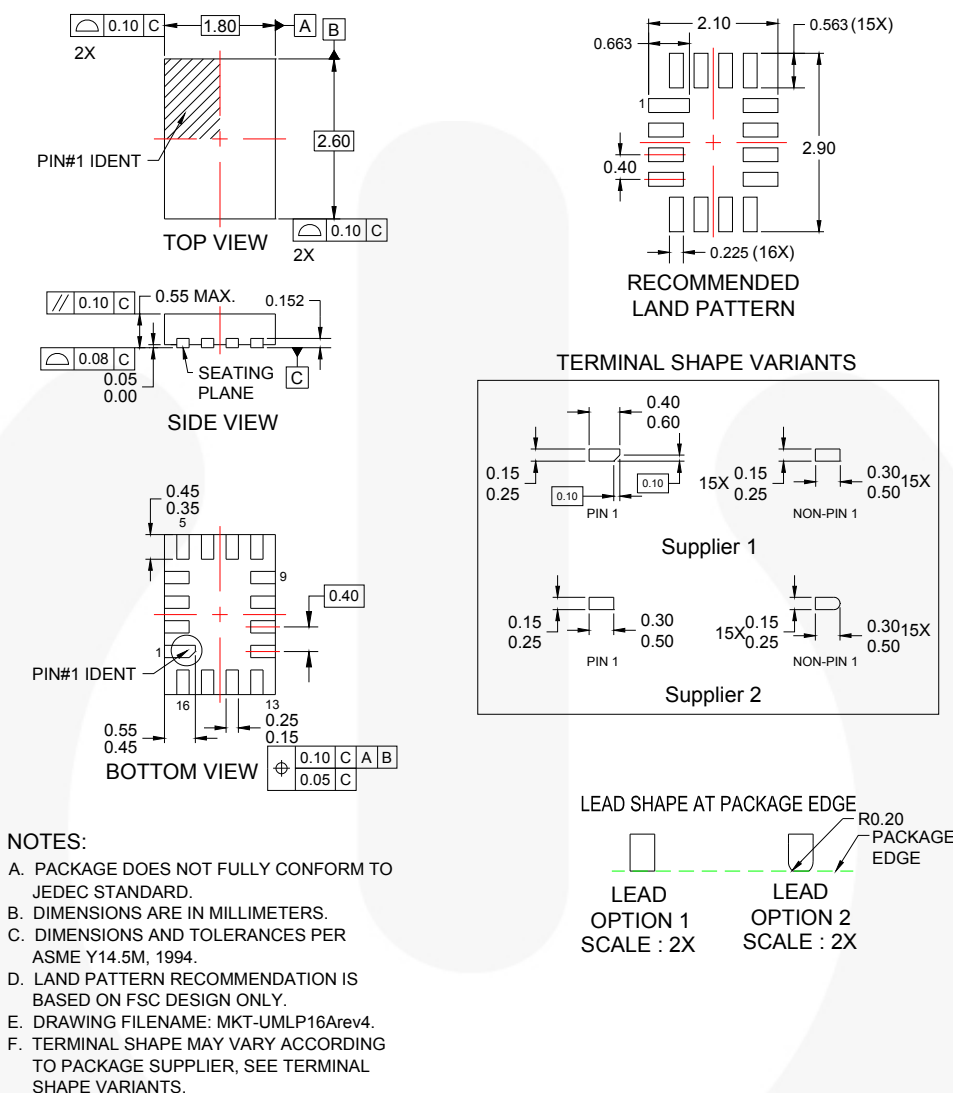


Figure 20. 16-Lead, Ultrathin Molded Leadless Package (UMLP)

Description	Nominal Values for MKT-UMLP16A Rev4 (mm)
Overall Height	0.50
Package Standoff	0.012
Lead Thickness	0.15
Lead Width	0.20
Lead Length	0.40
Lead Pitch	0.40
Body Length (Y)	Min: 2.50, Nom: 2.60, Max: 2.70
Body Width (X)	Min: 1.70, Nom: 1.80, Max: 1.90



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