



## FSA3341 — High-Speed 4:1 USB2.0 / MHL™ Switch

### Features

- Low On Capacitance: 4.2 pF / 5 pF MHL / USB (Typical)
- Low Power Consumption: 30  $\mu$ A Maximum
- Supports MHL Rev. 2.0
- Three USB2.0 Paths
- MHL Data Rate: 4.0 Gbps
- Packaged in 16-Lead UMLP (1.8 x 2.6 mm)
- Over-Voltage Tolerance on All USB Ports: Up to 5.25 V without External Components

### Applications

- Cell Phones and Digital Cameras

### Description

The FSA3341 is a bi-directional, low-power, high-speed, 4:1, USB2.0 and MHL™ switch. Configured as a Double-Pole, Four-Throw (DP4T) switch; it is optimized for switching between high- or full-speed USB and Mobile High-Definition Link sources (MHL Rev. 2.0 specification). In addition, the USB2.0 paths can be used as UART paths.

The FSA3341 contains circuitry on the switch I/O pins that allows the device to withstand an over-voltage condition for applications where the  $V_{CC}$  supply is powered off ( $V_{CC} = 0$  V). 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 connector switching and connector sharing in portable cell phones, digital cameras, and notebook computers.

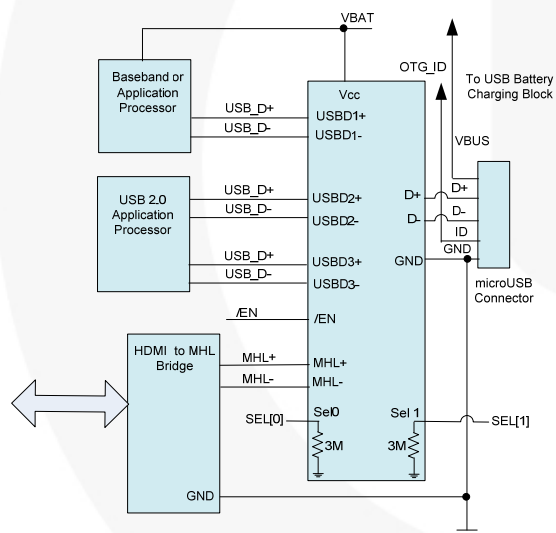


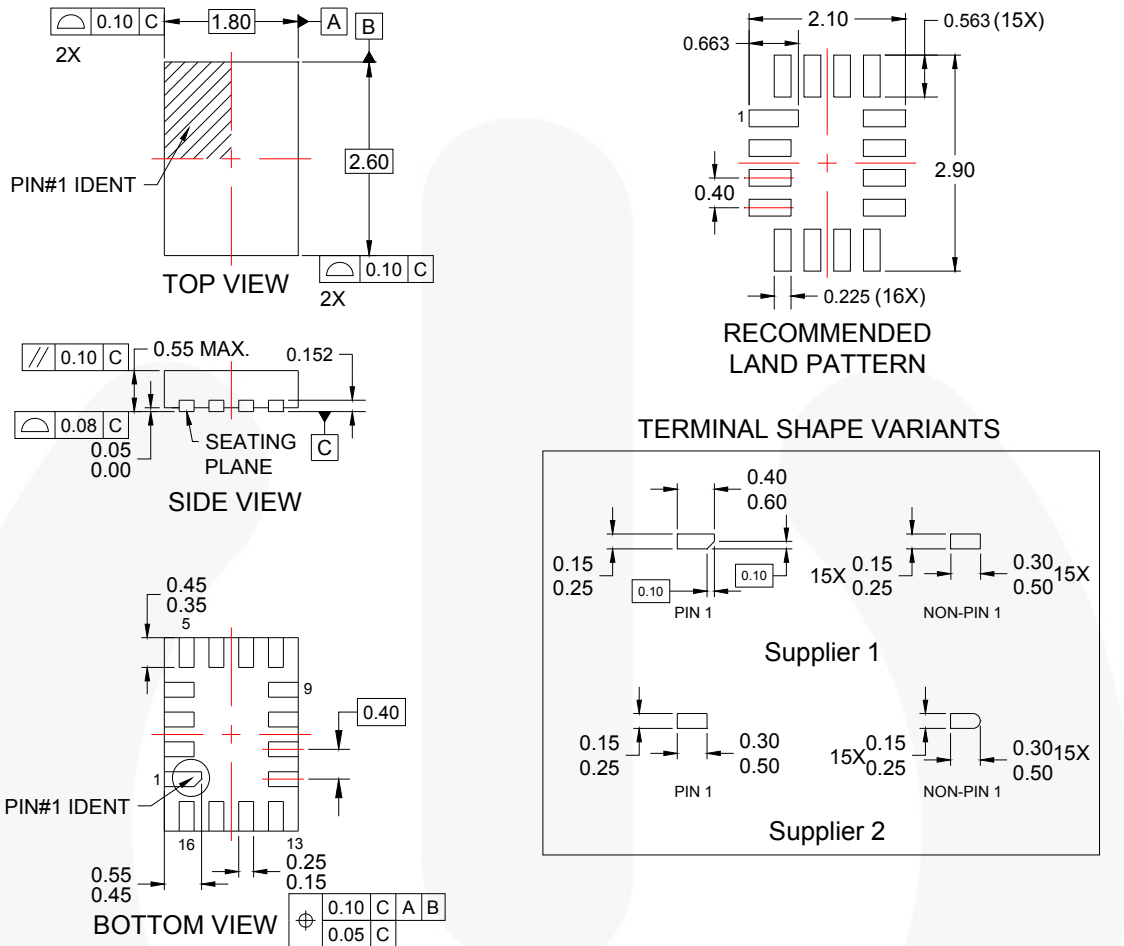
Figure 1. Typical Application

### Ordering Information

| Part Number | Top Mark | Operating Temperature Range | Package  |
|-------------|----------|-----------------------------|--|
| FSA3341UMX  | LY       | -40 to +85°C                | 16-Lead, Ultrathin Molded Leadless Package (UMLP), 1.8 mm x 2.6 mm |

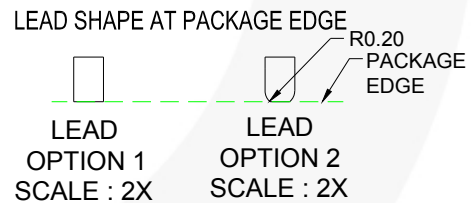
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## Physical Dimensions



### NOTES:

- A. PACKAGE DOES NOT FULLY CONFORM TO JEDEC STANDARD.
- B. DIMENSIONS ARE IN MILLIMETERS.
- C. DIMENSIONS AND TOLERANCES PER ASME Y14.5M, 1994.
- D. LAND PATTERN RECOMMENDATION IS BASED ON FSC DESIGN ONLY.
- E. DRAWING FILENAME: MKT-UMLP16Arev4.
- F. TERMINAL SHAPE MAY VARY ACCORDING TO PACKAGE SUPPLIER, SEE TERMINAL SHAPE VARIANTS.



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






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| AccuPower™   | FRFET®  | PowerXS™   | <b>the power franchise</b>  |
| AX-CAP™*   | Global Power Resource™  | Programmable Active Droop™   | TinyBoost™  |
| BitSiC™  | GreenBridge™  | QFET®  | TinyBuck™   |
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Rev. I62