July 2015

FUSB340 — Product Brief
USB 3.1 SuperSpeed 10 Gbps Switch

Features

- 10 GHz Typical Bandwidth
- USB 3.1 SuperSpeed 10 Gbps Switch
- -1.0 dB Typical Insertion Loss at 2.5 GHz
- Low Active Power of 12 µA Typical
- Low Shutdown Power of < 1 µA Max.
- 2 kV HBM ESD Protection
- Small Packaging, 18 Lead TMLP
- Wide V_{DD} Operating Range, 1.5 V-5.0 V

Applications

- Smartphones
- Tablets
- Notebooks

Description

The FUSB340 is a 2:1 data switch for 10 Gbps SuperSpeed USB data. It is targeted at the mobile device market and for use in Type-C applications where a reversible cable requires a switch.

The FUSB340 data switch offers superior performance various high speed data transmission protocols:

- USB 3.1 SuperSpeed (Gen 2), 10 Gbps
- PCI Express, Gen 3
- SATA
- Fibre Channel
- Display Port 1.2

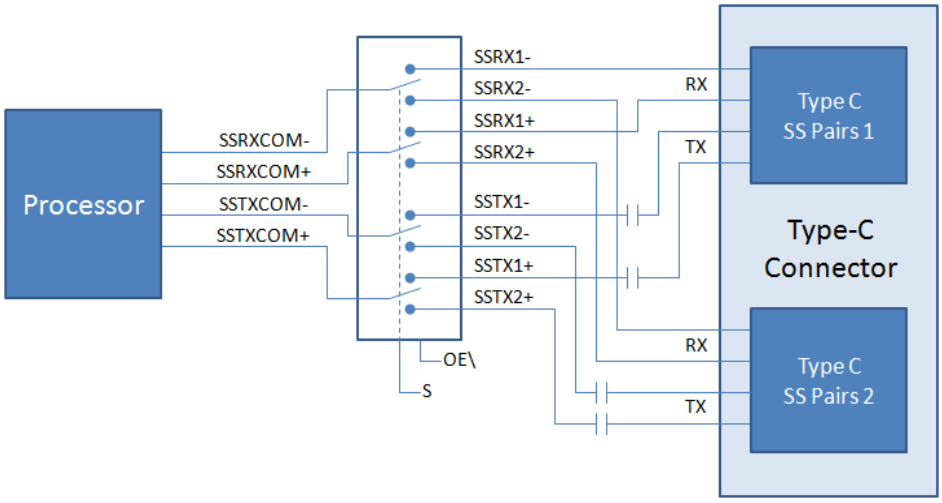

Figure 1. Block Diagram

Ordering Information

Part Number	Operating Temperature Range	Package	Packing Method
FUSB340TMX	-40 to 85°C	18-Lead, Quad, Ultra-ultrathin Molded Leadless Package (TMLP), 2.0 mm x 2.8 mm x 0.375 mm	Tape and Reel

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Pin Descriptions

Name	Type	Description
SSTXCOM-	SW	SuperSpeed TX- Common
SSTXCOM+	SW	SuperSpeed TX+ Common
GND	GND	Ground (connected to die attach pad)
SSRXCOM-	SW	SuperSpeed RX- Common
SSRXCOM+	SW	SuperSpeed RX+ Common
S	Input	Switch Select (0=SW1, 1=SW2)
/OE	Input	Output Enable (0=Switches Enabled, 1=Switches Disabled)
SSRX2+	SW	SuperSpeed RX2+
SSRX2-	SW	SuperSpeed RX2-
SSRX1+	SW	SuperSpeed RX1+
SSRX1-	SW	SuperSpeed RX1-
GND	GND	Ground (connected to die attach pad)
SSTX2+	SW	SuperSpeed TX2+
SSTX2-	SW	SuperSpeed TX2-
SSTX1+	SW	SuperSpeed TX1+
SSTX1-	SW	SuperSpeed TX1-
V_{DD}	VDD	Device Power
GND	GND	Ground

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Physical Dimensions

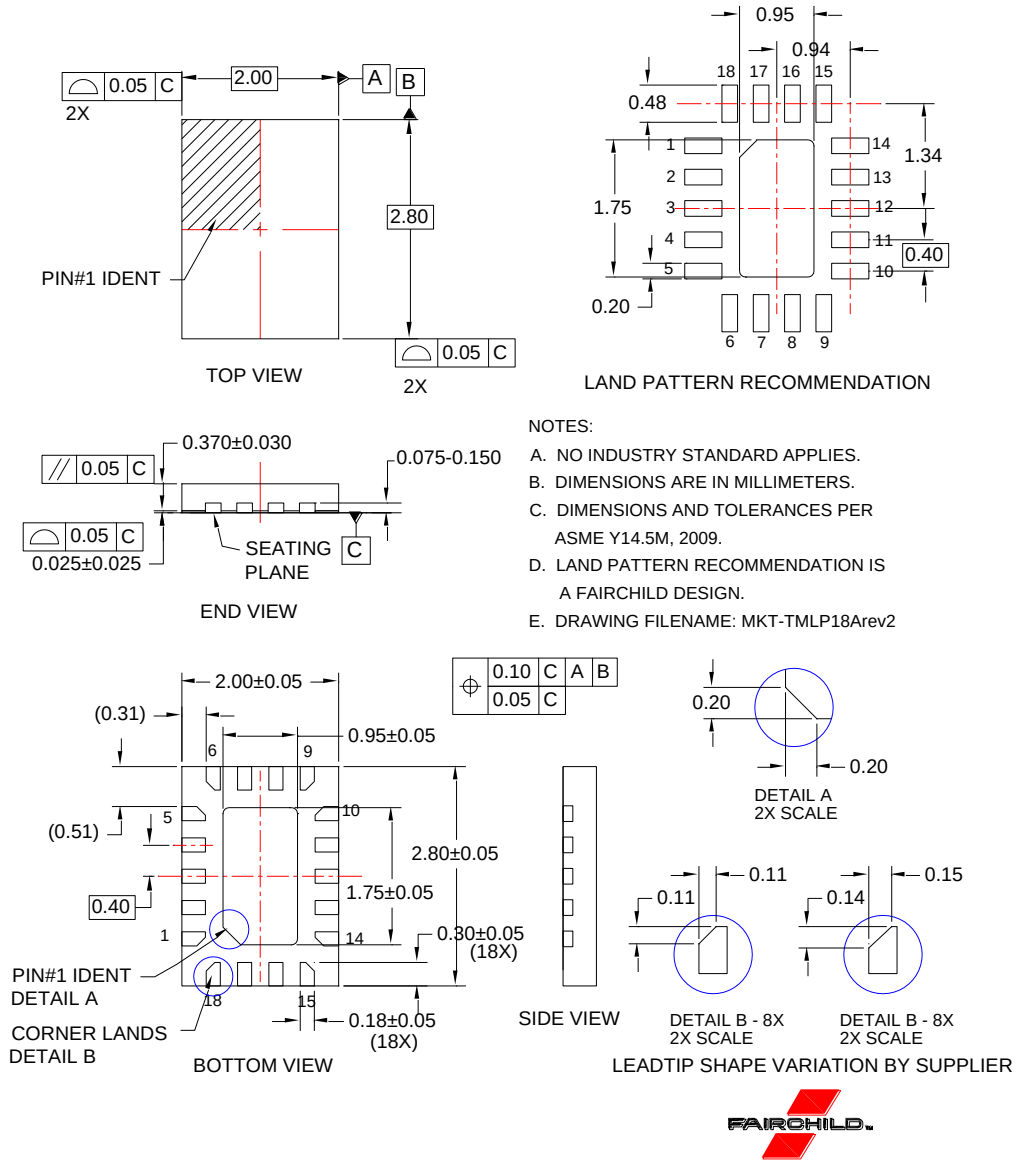

Figure 2. 18 Lead, UMLP, Quad, Ultra-Thin MLP, 1.8 x 2.6 mm

Product-Specific Dimensions

Product	A	B
FUSB340TMX	2.00 mm	2.80 mm

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