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LIMITED DATASHEET

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July 2012

FSA9485 — USB Port Multimedia Switch Featuring Automatic Switching and Accessory Detection

Features

Switch Type	Audio, USB, UART, Video, Charging
Switch Mechanism	Automatic Switching with Available Interrupt
Accessory Detection	Headsets with MIC and Remote USB Data Cable UART Serial Link USB Chargers (Car, CDP, DCP) Factory-Mode Cables Teletype (TTY) Converter USB OTG CEA-936-A Car Kit Video
USB	Full-Speed and High-Speed 2.0 Compliant
USB Charging	Integrated FET, Charger Detect, OCP (1.5A), OVT (28V), 7V OVP
Audio	Left, Right, MIC (Negative Swing)
UART	RxD & TxD
Video	Composite
V_{BAT}	3 to 4.4V
Programmability	I^2C
ESD	15kV IEC 61000-4-2 Air Gap
Package	25-Ball WLCSP (2.1x2.1x0.625mm)
Ordering Information	FSA9485UCX

Description

The FSA9485 is a high-performance multimedia switch featuring automatic switching and accessory detection for the USB port. The FSA9485 allows the sharing of a common USB port to pass audio, video, USB data / charging / On-The-Go (OTG), as well as factory programmability.

In addition, the FSA9485 integrates detection for accessories such as headphones, headsets (MIC / Button), CEA-936-A Car Kit, USB chargers, and UART data cables to use a common USB connector. The FSA9485 can be programmed for manual switching or automatic switching of data paths based on the accessory detected.

With integrated 28V over-voltage protection and 1.5A over-current protected FET, the FSA9485 integrates common USB protection devices for V_{BUS}.

Applications

- Mobile Phones & Portable Media Players

Additional Information

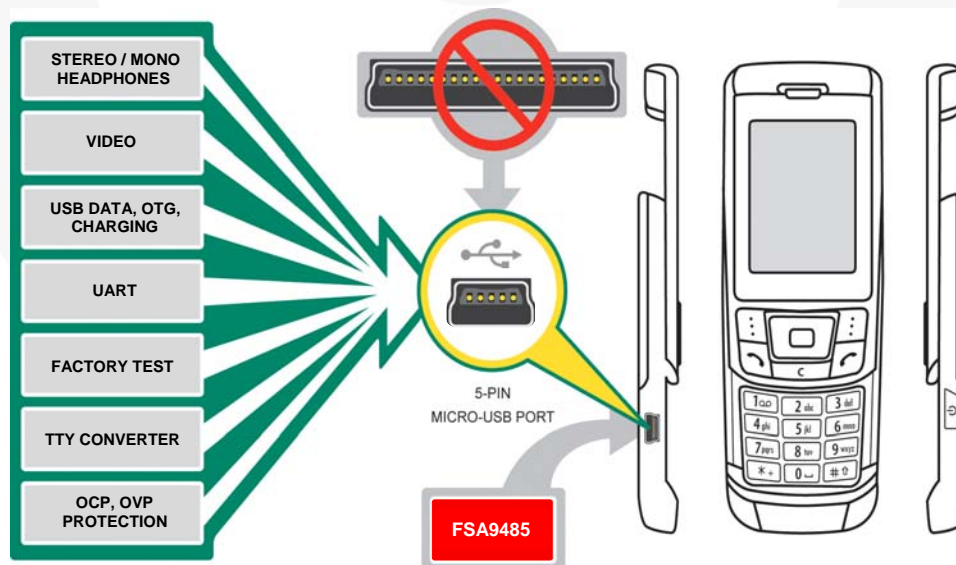- *For additional performance information, please contact analogswitch@fairchildsemi.com.*

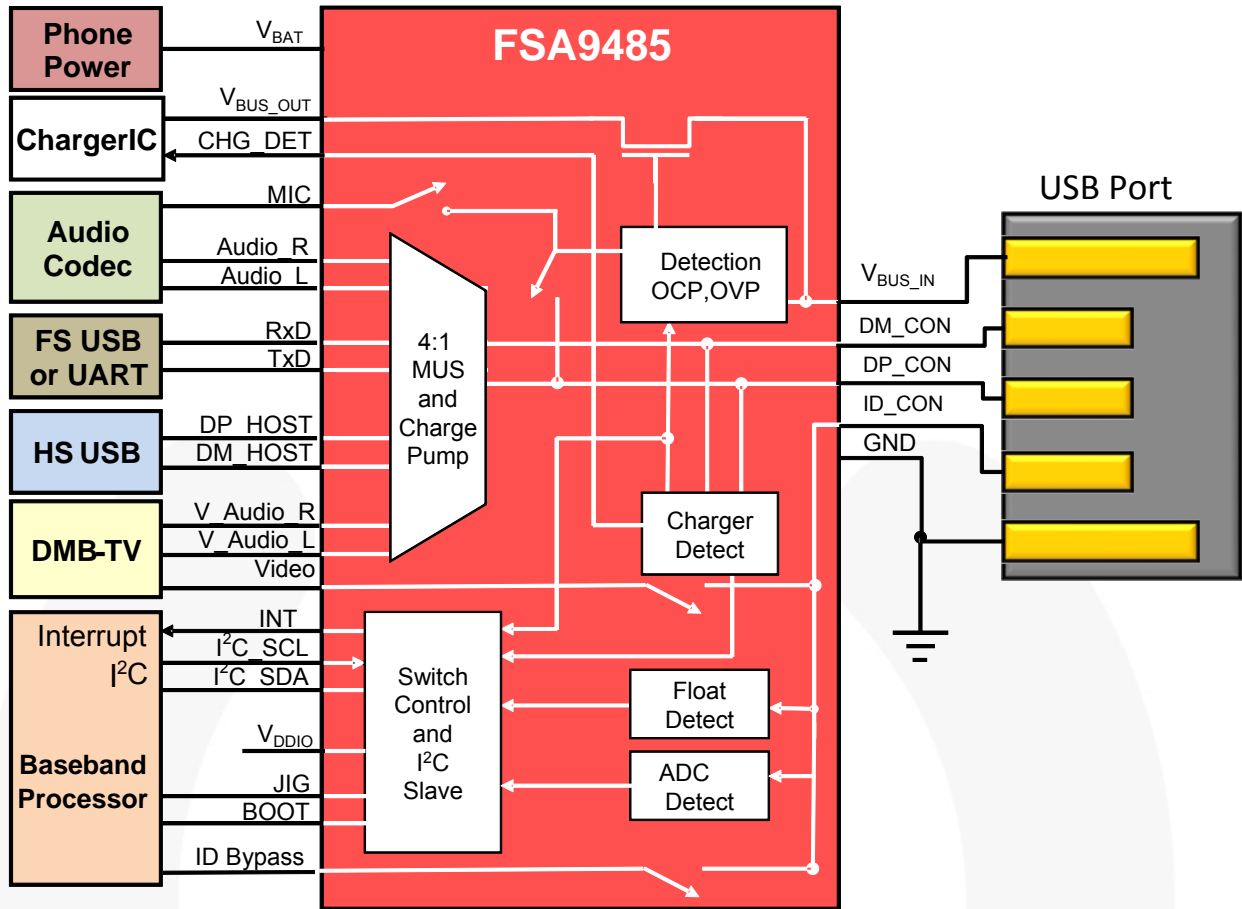
Figure 1.   Typical Application
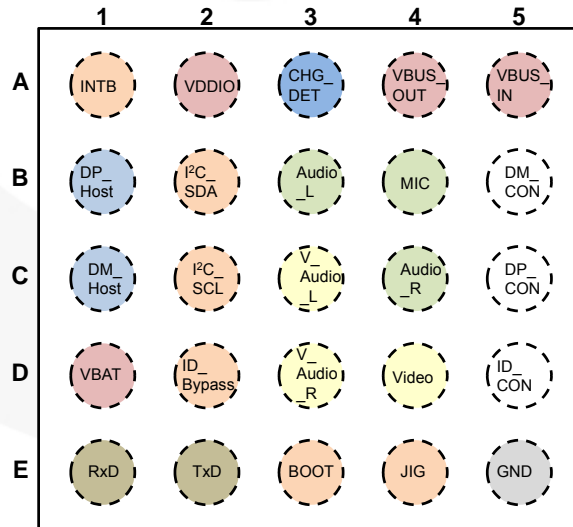
Block Diagram

Figure 2.   Block Diagram

Pin Configuration
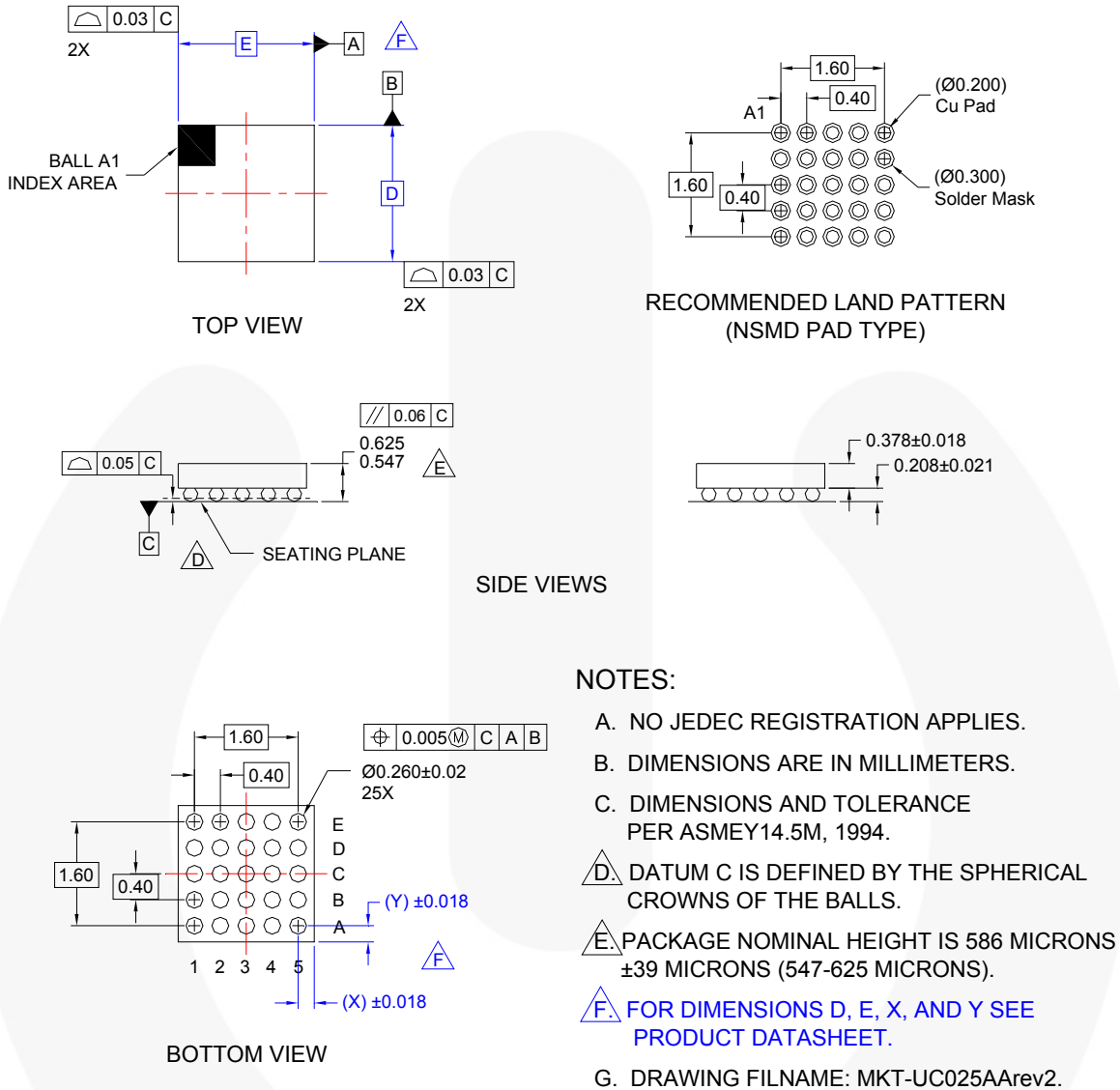

Figure 3.   Pin Configuration (Top-Through View)

Physical Dimensions

⌒ 0.03 C
2X

E → A F

B

BALL A1
INDEX AREA

D

⌒ 0.03 C
2X

TOP VIEW

1.60
0.40

A1

1.60   0.40

(Ø0.200)
Cu Pad

(Ø0.300)
Solder Mask

RECOMMENDED LAND PATTERN
(NSMD PAD TYPE)

// 0.06 C
0.625
0.547

⌒ 0.05 C

E

C   D   SEATING PLANE

SIDE VIEWS

0.378±0.018
0.208±0.021

NOTES:

A. NO JEDEC REGISTRATION APPLIES.

B. DIMENSIONS ARE IN MILLIMETERS.

C. DIMENSIONS AND TOLERANCE
PER ASMEY14.5M, 1994.

D. DATUM C IS DEFINED BY THE SPHERICAL
CROWNS OF THE BALLS.

E. PACKAGE NOMINAL HEIGHT IS 586 MICRONS
±39 MICRONS (547-625 MICRONS).

F. FOR DIMENSIONS D, E, X, AND Y SEE
PRODUCT DATASHEET.

G. DRAWING FILNAME: MKT-UC025AArev2.

1.60
0.40

⊕ 0.005Ⓜ C A B
Ø0.260±0.02
25X

1.60   0.40

E
D
C
B
A

1 2 3 4 5

(Y) ±0.018

(X) ±0.018

F

BOTTOM VIEW

Figure 25.   25-Lead, Wafer-Level Chip-Scale Package (WLCSP)

Product-Specific Dimensions

Product	D	E	X	Y
FSA9485UCX	2.10	2.10	0.25	0.25

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