FAIRCHILD™

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

Features

- 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
- Audio, USB, UART, Video, Charging
- Full-Speed and High-Speed 2.0 Compliant
- Automatic Switching with Available Interrupt
- Integrated FET, Charger Detect, OCP (1.5 A), OVT (28 V), 7 V OVP
- Left, Right, MIC (Negative Swing)
- UART: RxD & TxD
- Video: Composite
- V_{BAT}: 3 to 4.4 V
- Programmability: I^2C
- 15 kV IEC 61000-4-2 Air Gap

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 28 V over-voltage protection and 1.5 A 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.*

Ordering Information

Part Number	Operating Temperature Range	Top Mark	Package
FSA9485UCX [1]	-40 to +85°C	N6	25-Lead, 2.1 x 2.1 x 0.625 mm WLCSP Package

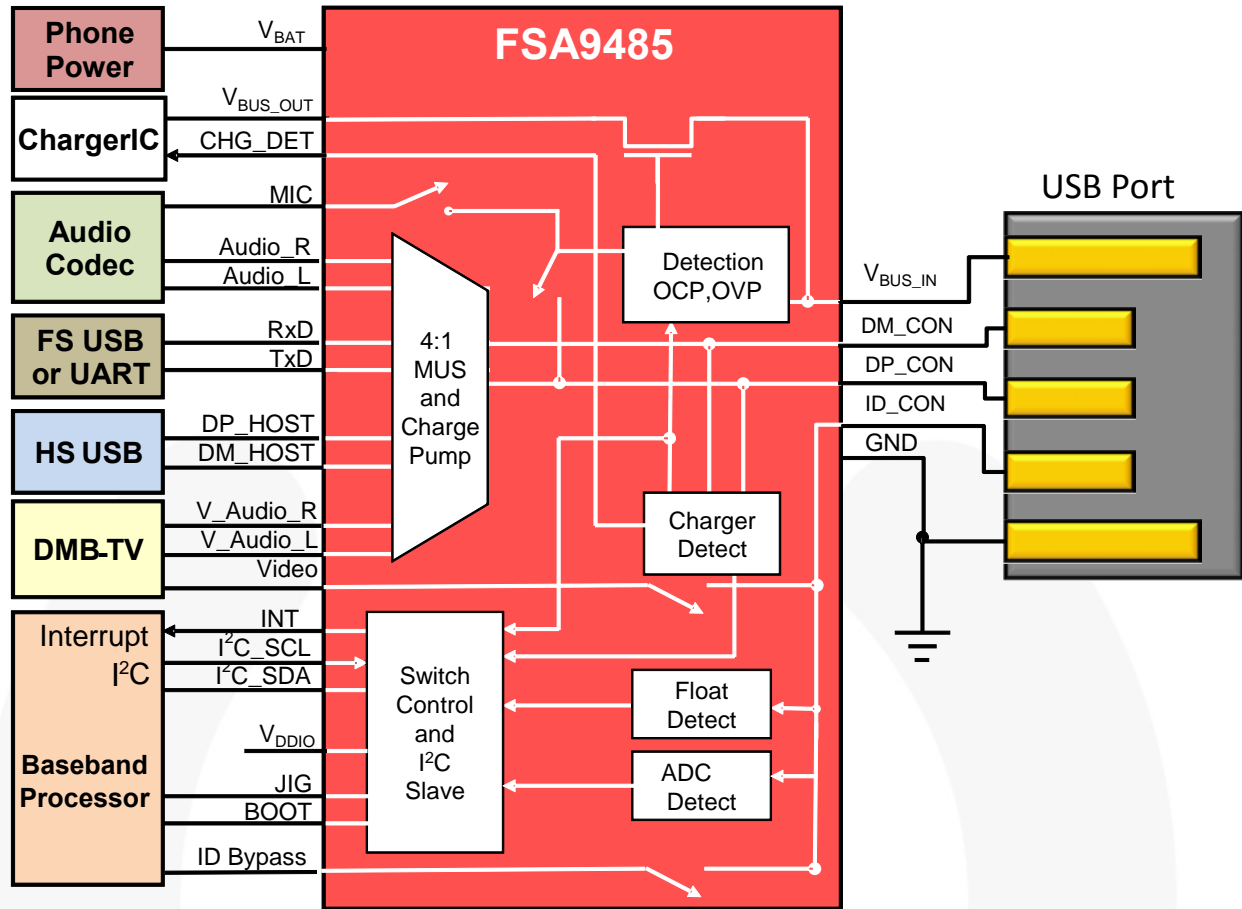**Note:**
1. Includes backside lamination.

Block Diagram
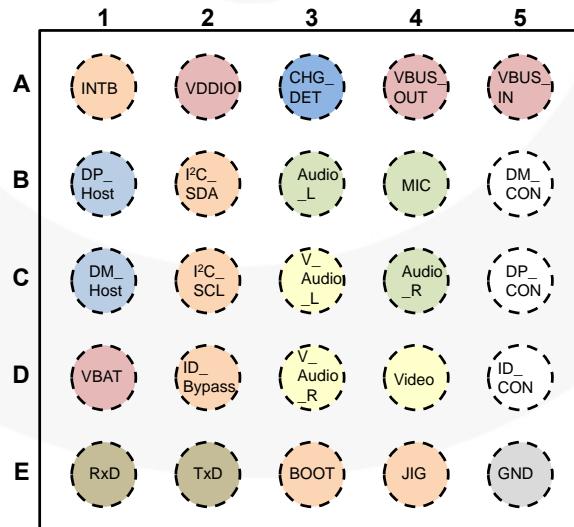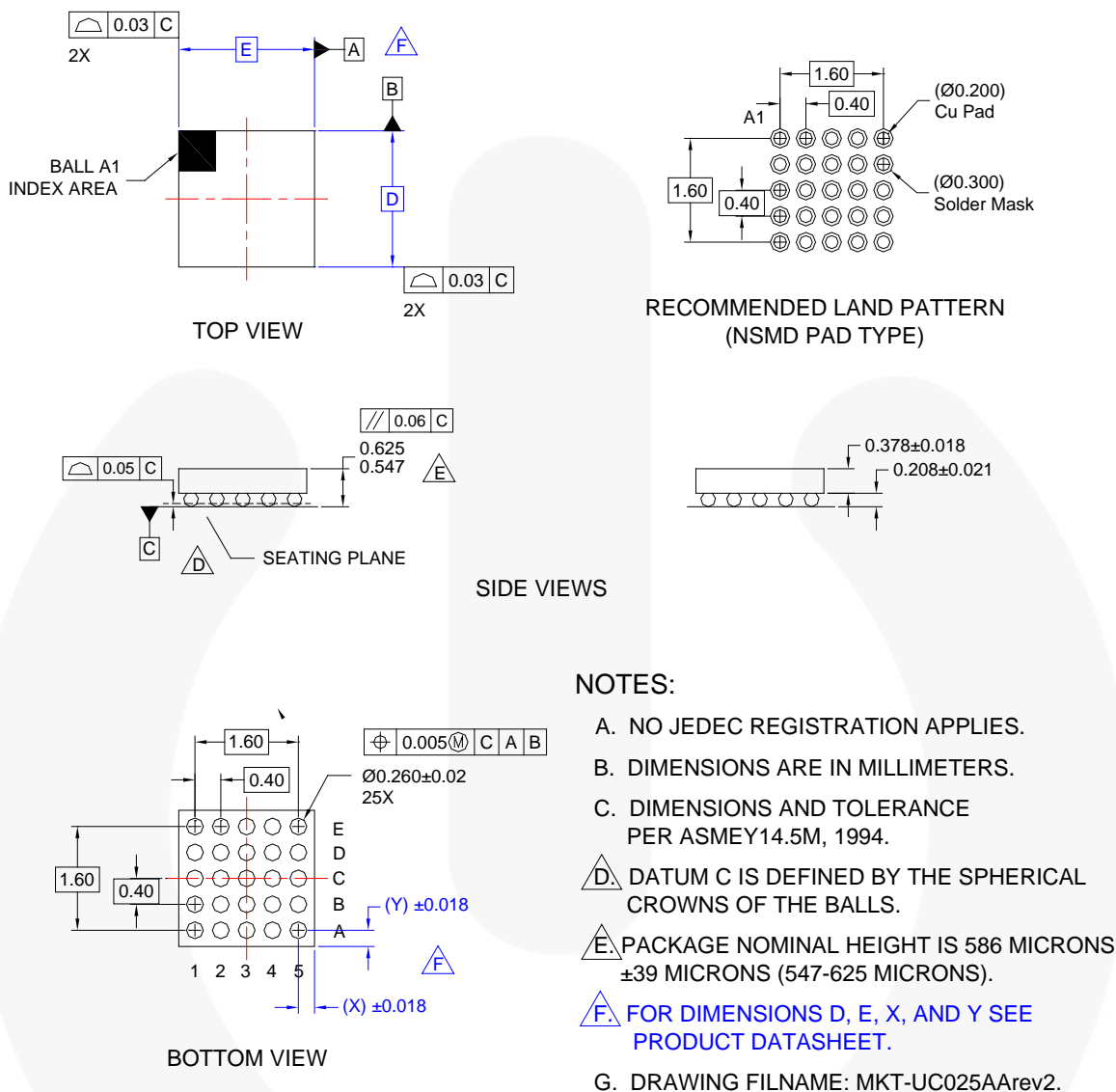
Figure 2.   Block Diagram

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

(Ø0.200)
Cu Pad

1.60
0.40

(Ø0.300)
Solder Mask

RECOMMENDED LAND PATTERN
(NSMD PAD TYPE)

// 0.06 C

0.05 C

0.625
0.547
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

(Y) ±0.018

1 2 3 4 5

(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

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:
http://www.fairchildsemi.com/packaging/.

For current packing container specifications, visit Fairchild Semiconductor's online packaging area:
http://fsce132/packing_dwg/PKG-UC025AA.pdf.

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EcoSPARK®	and Better™	Saving our world, 1mW/W/kW at a time™	TriFault Detect™
EfficientMax™	MegaBuck™	SignalWise™	TRUECURRENT®*
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FastvCore™	OPTOLOGIC®	SuperSOT™-8	VisualMax™
FETBench™	OPTOPLANAR®	SupreMOS®	VoltagePlus™
FPS™		SyncFET™	XS™
		Sync-Lock™	仙童™

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative / In Design	Datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.

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