March 2011



FSA8008/FSA8008A **Audio Jack Detection and Configuration Switch**

Features

	Accessory Plug-In		
Detection	3- or 4-Pole Audio Jack		
	Send/End Key Pressed		
	FSA8008		-
Functionality	FSA8008A	Dec	reased Timing
		for \$	Sensitive
		Send/End Keys	
Switch Type	MIC		
V_{DD}	2.5 to 4.4V		
V _{IO}	1.6 to V _{DD}		
THD (MIC)	0.01% Typical		
ESD (Air Gap)	15kV		
Operating Temperature			-40°C to 85°C
Package			10-Lead UMLP
	1.4x1.8x0.5mm, 0.4mm Pitch		
Top Mark	FSA8008		KC
	FSA8008A		KD
			FSA8008UMX
Ordering Information		F	SA8008AUMX

Applications

- 3.5mm and 2.5mm Audio Jacks
- Cellular Phones, Smartphones
- MP3 and PMP

Typical Application

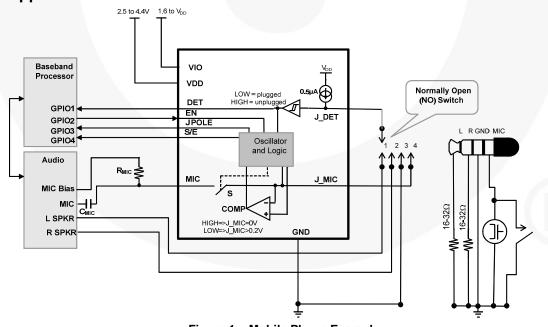
Description

The FSA8008/FSA8008A is an audio jack detector and switch for 3- or 4-pole accessories. In addition to detection, the FSA8008/FSA8008A features an integrated MIC switch that allows the processor to configure the audio jack. The architecture is designed to allow common third-party headphones to be used for listening to music from mobile handsets, personal media players, and portable peripheral devices.

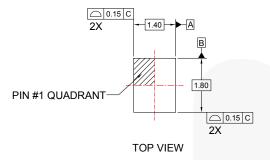
- Determines 3- or 4-Pole Audio Jacks
- Removes Audio Jack Pop-n-Click Caused by MIC Bias
- **Detects Audio Jack Accessories:**
 - Standard Headphones
 - Headsets with MIC
 - Send / End Button Presses
- Integrates a MIC Switch for 4-Pole Configuration

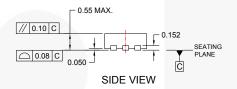
Related Resources

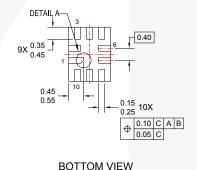
- FSA8008/FSA8008A Demonstration Board
- For samples and questions, please contact: Analog.Switch@fairchildsemi.com.

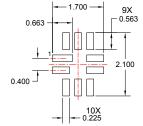


Physical Dimensions

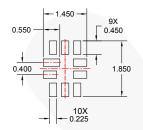




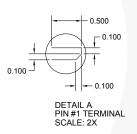




RECOMMENDED LAND PATTERN



OPTIONAL MINIMIAL TOE LAND PATTERN



NOTES:

- A. DIMENSIONS ARE IN MILLIMETERS.
- B. DIMENSIONS AND TOLERANCES PER ASME Y14.5M, 1994
- C. DRAWING FILENAME: UMLP10Arev2

Figure 4. 10-Lead UMLP Package Drawing

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/.

Ordering Information

Part Number	Operating Temperature Range	Top Mark	Package	
FSA8008UMX	-40 to +85°C	KD	10-Lead 1.4 x 1.8 x 0.55mm, 0.4mm pitch Ultrathi	
FSA8008AUMX		KC	Molded Leadless Package (UMLP)	





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Datasheet Identification	Product Status	Definition	
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Preliminary	First Production	Datasheet contains preliminary data; supplementary data will be published at a later date. Fairchill 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	Obsolete Not In Production Datasheet contains specifications on a product that is discontinued by Fairchild Semicond The datasheet is for reference information only.		

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