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		
Functionality	FSA8008		-
	FSA8008A	Decreased Timing	
		for Sensitive	
		Send/End Keys	
Switch Type	MIC		
$V_{DD}$	2.5 to 4.4V		
V <sub>IO</sub>	1.6 to V <sub>DD</sub>		
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
Ondering Lafe weeting	FSA8008UMX		
Ordering Information		F	SA8008AUMX
			C/ 10000/ 1011/17

## **Applications**

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

# **Typical Application**

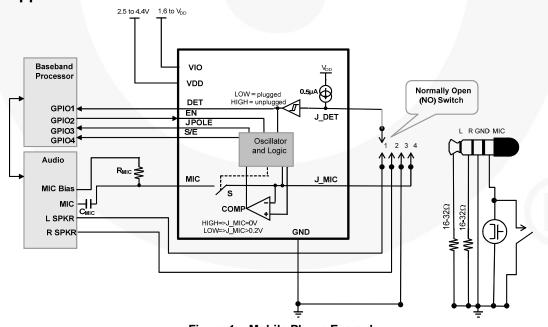
# **Description**

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.

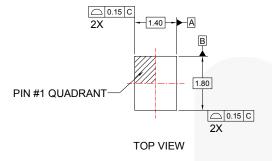
- Determines 3- or 4-Pole Audio Jacks
- Removes Audio Jack Pop-n-Click Caused by MIC Bias
- **Detects Audio Jack Accessories:** 
  - Standard Headphones
- Headsets with MIC
- Send / End Button Presses
- Integrates a MIC Switch for 4-Pole Configuration

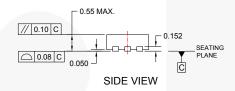
### **Related Resources**

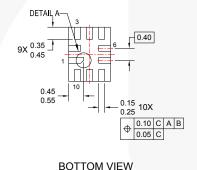
- FSA8008/FSA8008A Demonstration Board
- For samples and questions, please contact: Analog.Switch@fairchildsemi.com.

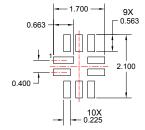


# **Physical Dimensions**

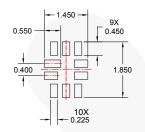




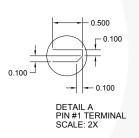




#### RECOMMENDED LAND PATTERN



#### 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.

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## **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 Ultrathii	
FSA8008AUMX		KC	Molded Leadless Package (UMLP)	





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