MARKING DIAGRAM

Features

Switch Type	DPDT (2x)
Input Type	Data / Audio Switch
Input Signal Range	0 to V_{CC}
V_{CC}	1.65 to 4.45 V
R_{ON}	2.5 Ω at 2.7 V
R_{FLAT}	0.8 Ω at 2.7 V
ESD	8 kV HBM
Bandwidth	245 MHz
C_{ON} at 240 MHz	16 pF
C_{OFF} at 240 MHz	6.0 pF
Features	Low I_{CTT}
Package	16−Lead UMLP 1.80 x 2.60 x 0.55 mm, 0.40 mm pitch
Top Mark	KA
Ordering Information	FSA2466UMX

Applications

- MP3 Portable Media Players
- Cellular Phones, Smartphones

Figure 1. Typical Mobile Phone Application

ORDERING INFORMATION

Part Number	Top Mark	Operating Temperature Range	Package	Shipping†
FSA2466UMX	KA	−40 to 85°C	16−Lead, Quad, Ultrathin Molded Leadless Package (UMLP), 1.8 x 2.6 mm	5000 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

Pin Configuration

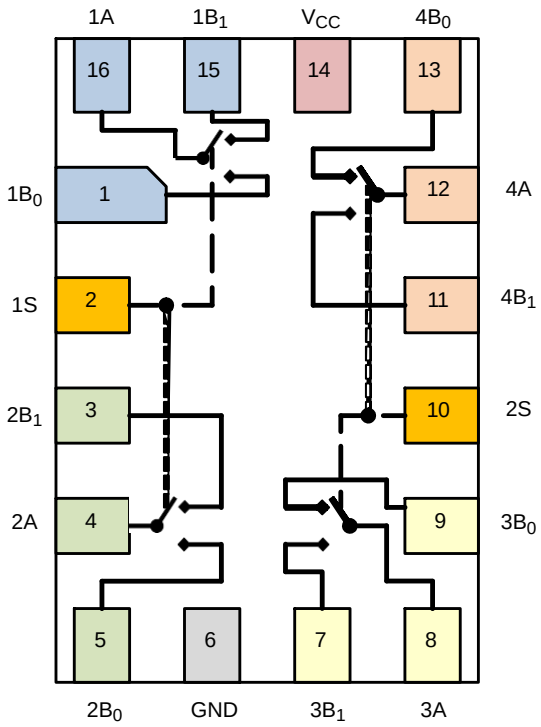


Figure 2. FSA2466UMX (Top View)

PIN DESCRIPTIONS

Pin #	Name	Type	Description		
1	$1B_0$	I/O	Data / Audio Port		
2	1S	Input	Control Input for Data & Common Ports 1 & 2	0	$1B_0$ = 1A & $2B_0$ = 2A
				1	$1B_1$ = 1A & $2B_1$ = 2A
3	$2B_1$	I/O	Data / Audio Port		
4	2A	I/O			

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter		Min	Max	Unit
V_{CC}	Supply Voltage		−0.50	5.25	V
V_S	Switch Voltage		−0.5	V_{CC} + 0.3	V
V_{IN}	Input Voltage		−0.5	5.0	V
I_{IK}	Input Diode Current		−50		mA
I_{SW}	Switch Current			350	mA
I_{SWPEAK}	Peak Switch Current (Pulsed at 1 ms Duration, <10% Duty Cycle)			500	mA
T_{STG}	Storage Temperature Range		−65	+150	°C
T_J	Junction Temperature			+150	°C
T_L	Lead Temperature, Soldering 10 seconds			+260	°C
ESD	Human Body Model, JESD22−A114	I/O to GND		8	kV
		Power to GND		8	
		All Other Pins		8	

DC ELECTRICAL CHARACTERISTICS

(Typical values are at T_A = 25°C unless otherwise specified.)

Symbol	Parameter	Condition	V_{CC} (V)	T_A = +25°C			T_A = −40 to +85°C		Unit
				Min.	Typ.	Max.	Min.	Max.	
V_{IH}	Input Voltage High		4.30				1.4		V
			2.70 to 3.60				1.3		
			2.30 to 2.70				1.1		
			1.65 to 1.95				0.9		
V_{IL}	Input Voltage Low		4.30					0.7	V
			2.70 to 3.60					0.5	
			2.30 to 2.70					0.4	
			1.65 to 1.95					0.4	
I_{IN}	Control Input Leakage	V_{IN} = 0 V to V_{CC}	1.65 to 4.30				−0.5	0.5	μA
$I_{NO(OFF)}$ $I_{NC(OFF)}$	Off Leakage Current of Port nB0 and nB1	nA=0.3 V, V_{CC}−0.3V	1.95 to 4.30	−10		10	−50	50	nA
		nB0 or nB1=0.3 V, V_{CC}−0.3V or Floating							
$I_{A(ON)}$	On Leakage Current of Port A	nA = 0.3 V, V_{CC}−0.3V	1.95 to 4.30	−10		10	−50	50	nA
		nB0 or nB1 = 0.3 V, V_{CC}−0.3V or Floating							
R_{ON}	Switch On Resistance (Note 3)	I_{OUT}=100 mA	4.30						
		I_{OUT}=100 mA, nB0 or nB1							
			2.30						
		CC							

AC ELECTRICAL CHARACTERISTICS

(Typical values are are at T_A = 25°C unless otherwise specified.)

Symbol	Parameter	Condition	V_{CC}	T_A = +25°C			T_A = −40 to +85°C		Unit	Figure
				Min.	Typ.	Max.	Min.	Max.		
t_{ON}	Turn−On Time	nB_0 or nB_1=1.5 V R_L=50 Ω, C_L=35 pF	3.6 to 4.3			50		60	ns	Figure 3
			2.7 to 3.6			65		75		
			2.3 to 2.7			80		90		
t_{OFF}	Turn−Off Time	nB_0 or nB_1=1.5 V R_L=50 Ω, C_L=35 pF	3.6 to 4.3			32		40	ns	Figure 3
			2.7 to 3.6			42		50		
			2.3 to 2.7			Ω,				

AC Loadings and Waveforms

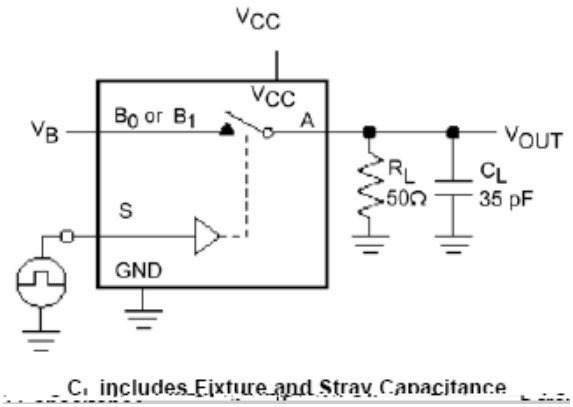


Figure 3. Turn−On / Turn−Off Timing

Figure 4. Break−Before−Make Timing

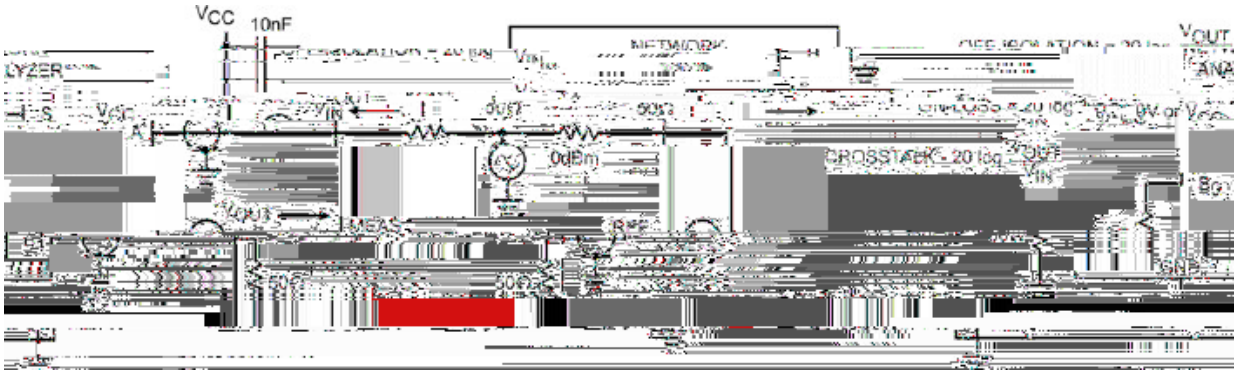


Figure 5. Off Isolation and Crosstalk

AC Loadings and Waveforms (Continued)

Figure 6. Charge Injection

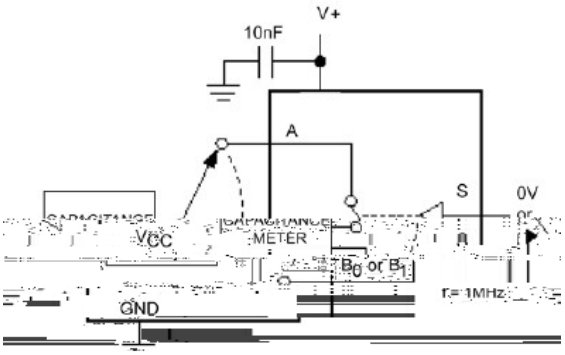


Figure 7. On / Off Capacitance Measurement Setup

Figure 8. Bandwidth

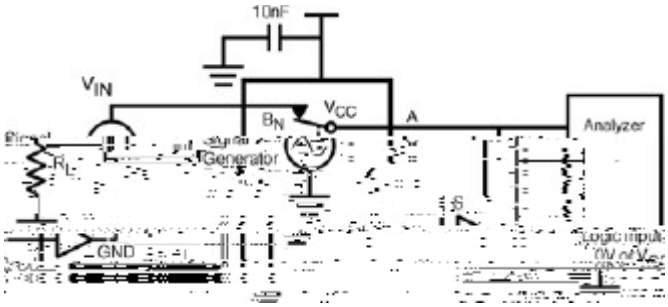
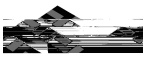


Figure 9. Harmonic Distortion



UQFN16 1.80x2.60x0.50, 0.40P
CASE 523BF
ISSUE A

DATE 06 MAY 2024

			⌀0.45
L4	0.45	0.50	0.55

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OLERANCES FOR FEATURE C