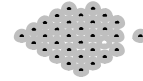


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2:1 MIPI D-PHY (4.5 Gbp) 4-Da a-Lane & C-PHY



(ie)



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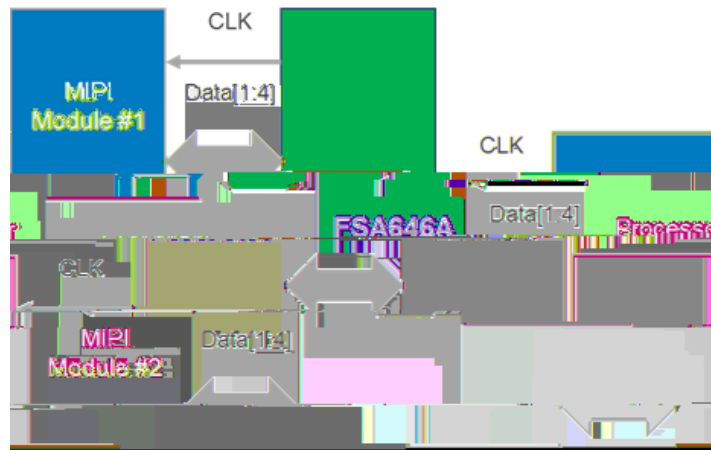


Figure 1. Typical D-PHY Application

PIN DESCRIPTIONS



Figure 2. Analog Symbol

PIN DEFINITIONS



Figure 3. Top Through View

Table 1. BALL-TO-PIN MAPPINGS

Ball

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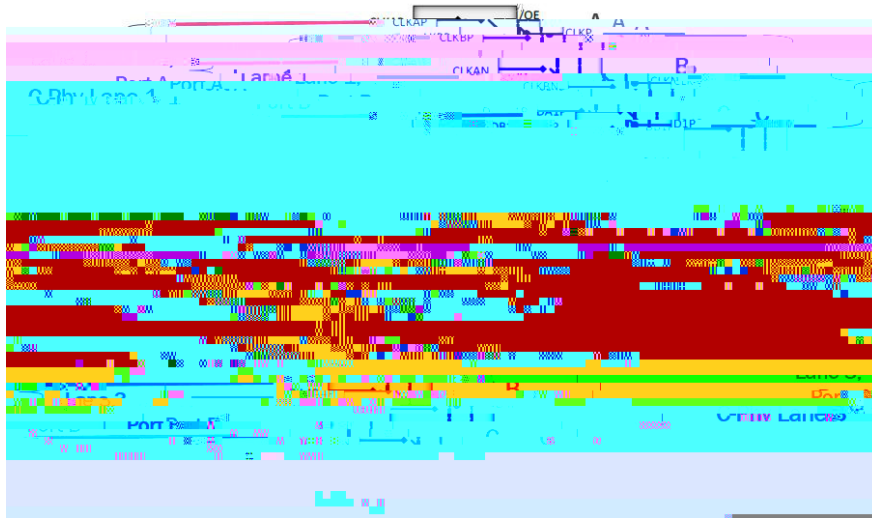


Figure 4. Recommended Configuration for C-PHY

TRUTH TABLE

SEL	/OE	Function
LOW	LOW	$CLK_P = CLKA_P$, $CLK_N = CLKA_N$, $Dn(P/N) = DAN(P/N)$
HIGH	LOW	$CLK_P = CLKB_P$, $CLK_N = CLKB_N$, $Dn(P/N) = DBn(P/N)$
X	HIGH	Clock and Data Ports High Impedance

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Min.	Max.	Unit
V_{CC}	Supply Voltage	-0.5	6.0	V
V_{CNTRL}	DC Input Voltage (/OE, SEL) (Note 1)	-0.5	V_{CC}	V
V_{SW}	DC Switch I/O Voltage (Note 1,2)	-0.3	2.1	V
I_{IK}	DC Input Diode Current	-50		mA
I_{OUT}	DC Output Current		25	mA
T_{STG}	Storage Temperature	-65	+150	°C
ESD	Human Body Model, JEDEC: JESD22-A114	All Pins		kV
	Charged Device Model, JEDEC: JESD22-C101	2.0	0.5	

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. The input and output negative ratings may be exceeded if the input and output diode current ratings are observed.
2. V_{SW} refers to analog data switch paths.

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RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter	Min.	Max.	Unit	
V_{CC}	Supply Voltage	1.5	5.0	V	
V_{CNTRL}	Control Input Voltage (SEL, /OE) (Note 3)	0	V_{CC}	V	
V_{SW}	Switch I/O Voltage (CLKn, Dn, CLKAn, CLKBn, Dan, DBn)	HS Mode	0	0.425	V
		LP Mode	-0.05	1.3	V
T_A	Operating Temperature	-40	+85	°C	

Functional operation above the stresses listed 61 15.369.509 645.449 289.247 .9071 re8Recommend .988 0 0 8f9

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DC AND TRANSIENT CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified) (continued)

Symbol	Parameter	Conditions	V_{CC} (V)	$T_A = -40$ to $+85^\circ\text{C}$	Max. Unit
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HIGH-SPEED-RELATED AC ELECTRICAL CHARACTERISTICS



WLCSP36 2.43x2.43x0.599
CASE 567XH
ISSUE O

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