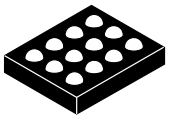


WLCSP12
CASE 567VZ

MARKING DIAGRAM

H6 = Two Digit Device Code
KK = Two Digit Lot Run Code (&K)
XY = Two Digit Date Code (&2)
Z = Assembly Plant Code (&Z)

ORDERING INFORMATION

See detailed ordering and shipping information on page 7 of this data sheet.

- These Devices are Pb−Free, Halogen Free/BFR Free and are RoHS Compliant

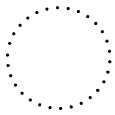
Applications

- Passive Cables

This document contains information on a product under development. **onsemi** reserves the right to change or discontinue this product without notice.

Table 1. 12−BALL WLCSP PIN DESCRIPTION

Pin#	Name	Description
A1	T1	Test Pin − Float
A2	NC	No Connect
A3	GND	Ground
B1	T2	Test Pin − Float
B2	T4	Test Pin – Float
B3	T6	Test Pin – Float
C1	T3	Test Pin − Float
C2	T5	Test Pin − Float
C3	CC	Configuration Channel (28V Tolerant)
D1	VCONN2	VCONN Power (28V Tolerant)
D2	GND	Ground
D3	VCONN1	VCONN Power (28V Tolerant)



DC AND TRANSIENT ELECTRICAL CHARACTERISTICS (Minimum and maximum values are at VCONNx = 2.4 V to 5.5 V, T_A = −40°C to +85°C unless otherwise noted. Typical values are at T_A = 25°C, VCONNx = 3.3 V)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
Current Consumption						
I_{pd_stby}	BMC PD standby current	VCONN = 2.4 to 5.5 Device attached, BMC PD active but not sending or receiving, Ra weakened. Other VCONN pin floating. CC pulled−up/down/float.			400	μA
BASEBAND PD SYSTEM						
UI	Unit Interval		3.03	3.33	3.7	μs
TRANSMITTER						
p						

DC AND TRANSIENT ELECTRICAL CHARACTERISTICS (Minimum and maximum values are at VCONNx = 2.4 V to 5.5 V, T_A = −40°C to +85°C unless otherwise noted. Typical values are at T_A = 25°C, VCONNx = 3.3 V) (continued)

Symbol	Parameter	Conditions	Min	Typ	Max	Units
USB PD SPECIFIC TIMING PARAMETERS						
$t_{Transmit}$	From receiving a packet, we have to send a GoodCRC in response within $t_{Transmit}$ time. It is measured from the last bit of the EOP of the received packet to the first bit sent of the preamble of the GoodCRC packet				195	μs
CABLE MARKER SPECIFIC						
$t_{VCONNStable}$	The time between the application of VCONN until SOP' and SOP" shall be ready for communication.	VCONN ≥ 2.4 V	10		50	ms
$V_{VCONN_RA_WEAK}$						

PRODUCT BLOCK DIAGRAM

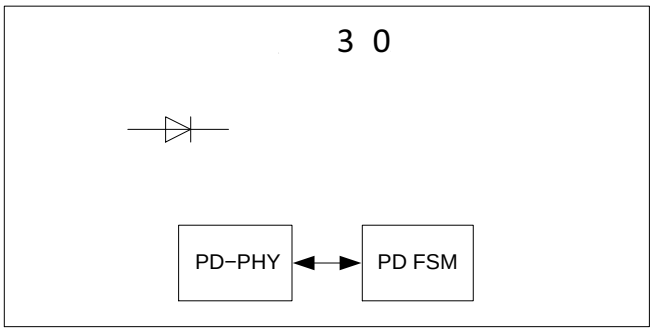


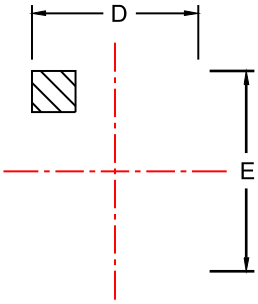
Figure 2. Block Diagram

Table 4. SUMMARY OF FIELD PROGRAMMABLE BITS

Parameter	Description	# of Bits
SERIAL NUMBERS		
MEM_CABLE_SN	Cable Serial Number	136
MEM_SN_SVID	Serial numbers replied in SVIDx 0 = SVID0 1 − SVID1	1
MEM_SN_COMMAND	Customer Serial Number SVID specific command	5
MEM_DIESN_COMMAND	Die Serial Number SVID specific command	5

Table 5. DEVICE ORDERING INFORMATION

Device	Top Marking	Temperature Range	Package	Shipping†
FUSB380CUCX	H6	−40°C to +85°C	WLCSP12 (Pb−	



1. DIMENSION

OLL

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VIEW

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