



## Overview

IntelliProp's IPB-SA116C-2-BD "Pumori" Board is a SATA connectivity card designed to implement expanded functionality for FPGA evaluation boards and evaluation kits using IntelliProp's SATA and SAS IP offerings. The IntelliProp "Pumori" is designed to work with evaluation boards offered by the leading FPGA suppliers.

## Features

- 9 SATA Connectors including an SMA to SATA adapter
- SATA connectors for multiple locations and multiple SATA cores in systems such as RAID or Port Multiplier
- 2 Differential Clocks (FMC and SMA) at 150 MHz each
- SMA to SATA converter for the SMA pins

## Applications

The IntelliProp "Pumori" board can be used with boards that have FMC SERDES connections. Pumori is designed to provide access for up to nine serial transceivers on HPC (high pin count) FMC connectors.

## Physical and Environmental

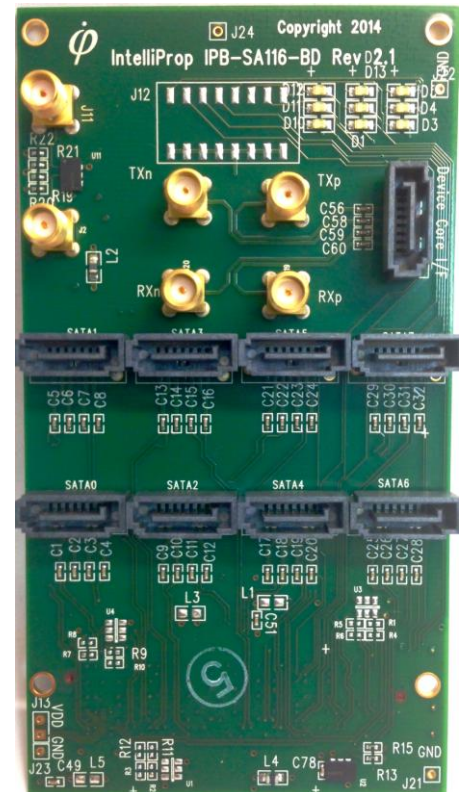
Board Dimensions: 2.717" x 5.000"

Commercial Temp Operating Range: 0° to +70° C

## Order Part Number

IPB-SA116C-2-BD

## IPB-SA116C-2-BD SATA Connectivity Board "Pumori"



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## "Pumori" Technical Overview

Pumori provides a number of connectors which break out the FPGA interface signals to and from the board interface using the FMC connector. Below is a generic FMC pin connection and locations of the SATA ports for the Pumori Board. The SMA connectors will vary with development boards

D	C	B	A	
NC	GND		GND	1
GND	C2 = SATA0_TXP0	GND	A2 = SATA1_RXP1	2
GND	C3 = SATA0_TXN0	GND	A3 = SATA1_RXN1	3
D4 = OSC2	GND	TX1_P (NC)	GND	4
D5 = OSC2	GND	TX1_N (NC)	GND	5
GND	C6 = SATA0_RXP0	GND	A6 = SATA2_RXP2	6
GND	C7 = SATA0_RXN0	GND	A7 = SATA2_RXN2	7
NC	GND	TX2_P (NC)	GND	8
NC	GND	TX2_N (NC)	GND	9
GND	NC	GND	A10 = SATA3_RXP3	10
NC	NC	GND	A11 = SATA3_RXN3	11
NC	GND	B12 = SATA7_RXP3	GND	12
GND	GND	B13 = SATA7_RXN3	GND	13
NC	NC	GND	A14 = SATA4_RXP0	14
NC	NC	GND	A15 = SATA4_RXN0	15
GND	GND	B16 = SATA6_RXP2	GND	16
NC	GND	B17 = SATA6_RXN2	GND	17
NC	NC	GND	A18 = SATA5_RXP1	18
GND	NC	GND	A19 = SATA5_RXP1	19
NC	GND	B20 = OSC1 (NOT POPULATED)	GND	20
NC	GND	B21 = OSC1 (NOT POPULATED)	GND	21
GND	NC	GND	A22 = SATA1_TXP1	22
NC	NC	GND	A22 = SATA1_TXN1	23
NC	GND	RX1_P (NC)	GND	24
GND	GND	RX1_N (NC)	GND	25
NC	NC	GND	A26 = SATA2_TXP2	26
NC	NC	GND	A27 = SATA2_TXN2	27
GND	GND	RX2_P (NC)	GND	28
NC	GND	RX2_N (NC)	GND	29
NC	NC	GND	A30 = SATA3_TXP3	30
NC	NC	GND	A31 = SATA3_TXN3	31
NC	GND	B32 = SATA7_TXP3	GND	32
NC	GND	B33 = SATA7_TXN3	GND	33
NC	NC	GND	A34 = SATA4_TXP0	34
NC	NC	GND	A35 = SATA4_TXN0	35
NC	GND	B36 = SATA6_TXP2	GND	36
GND	NC	B37 = SATA6_TXN2	GND	37
NC	GND	GND	B38 = SATA5_TXP1	38
GND	NC	GND	B39 = SATA5_TXN1	39
NC	GND	NC	GND	40
D	C	B	A	
LPC Connector				

Figure 1: "Pumori" Pin compatibility with FMC