

LD-QQSPI-PSRAM32 - 32MB PSRAM Module

Features

- 12-pin Pmod™ compatible interface
- Supports SPI (1-bit) and QSPI (4-bit) protocols
- Includes 256Mbits (32MB) QSPI PSRAM

Applications

- Expand available memory on FPGA development boards and other devices that provide PMod™ compatible expansion ports

General Description

The QQSPI module provides access to four Quad SPI devices via a 12-pin Pmod™ interface. This model is populated with four 64MBit (8MB) QSPI PSRAM banks for a total of 256Mbits (32MB) of PSRAM. The CS0 and CS1 signals are used to select the active PSRAM bank as shown in the Functional Modes table.

Pinout

Pin	Signal	Description
1	/SS	Slave Select (Active Low)
2	SIO0	Serial IO0 (MOSI)
3	SIO1	Serial IO1 (MISO)
4	SCLK	Serial Clock
5	GND	Ground
6	VCC	3.3V
7	SIO2	Serial IO2
8	SIO3	Serial IO3
9	CS0	Chip Select 0
10	CS1	Chip Select 1
11	GND	Ground
12	VCC	3.3V

See the Digilent Pmod™ Interface Specification for connection details.

Physical Dimensions

40mm x 20.32mm (V1)

30mm x 20.32mm (V2)

Functional Modes

PMOD/SS	PMODCS0	PMODCS1	QSPI1/CE	QSPI2/CE	QSPI3/CE	QSPI4/CE
H	X	X	H	H	H	H
L	L	L	L	H	H	H
L	H	L	H	L	H	H
L	L	H	H	H	L	H
L	H	H	H	H	H	L

Component Part Numbers

3-to-8 Multiplexer: SN74HCS138PWR

64MBit PSRAM: APS6404L-3SQR-SN

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