

VPX390: 3U OpenVPX Pre-integrated Development Platform



Introduction

VPX390 is an off-the-shelf turnkey signal acquisition system based on 3U OpenVPX. It provides customer with a pre-integrated and verified development platform which reduces customers' integration time so customer can focus on their core expertise domain.

It uses industry's leading edge ADC/DAC and FPGA modules for signal acquisition and processing. It can support up to 16 channel of ADC or DAC and all channels operate in synchronization. A Virtex-6/Virtex-7 FPGA with digital down/up conversion effectively reduces data rate for baseband signal processing. Optional RF down-converters extends RF input range up to 3GHz.

An Intel's 3rd Gen i7 SBC is used as system controller. It supports 8GB of DDR3 SDRAM, and gigabit Ethernet for remote control of the system.

A PCI Express/GbE Switch module is used for backplane fabric communication. It supports Gen 2 PCI Express for data-

Features:

- 3U OpenVPX
- ADC/DAC sampling rate from 200MS/s to 3.6GS/s
- Up to 16Ch Tx/Rx operation in synchronization
- Virtex-6/Virtex-7 FPGA
- DDC/DUC effectively reduces data rate for baseband processing
- 5th Gen Intel i7 SBC
- Gen 2 PCIe/GbE Switch
- 4TB SSD for storage
- Pre-integrated and verified
- Linux or Windows 7 OS

Applications:

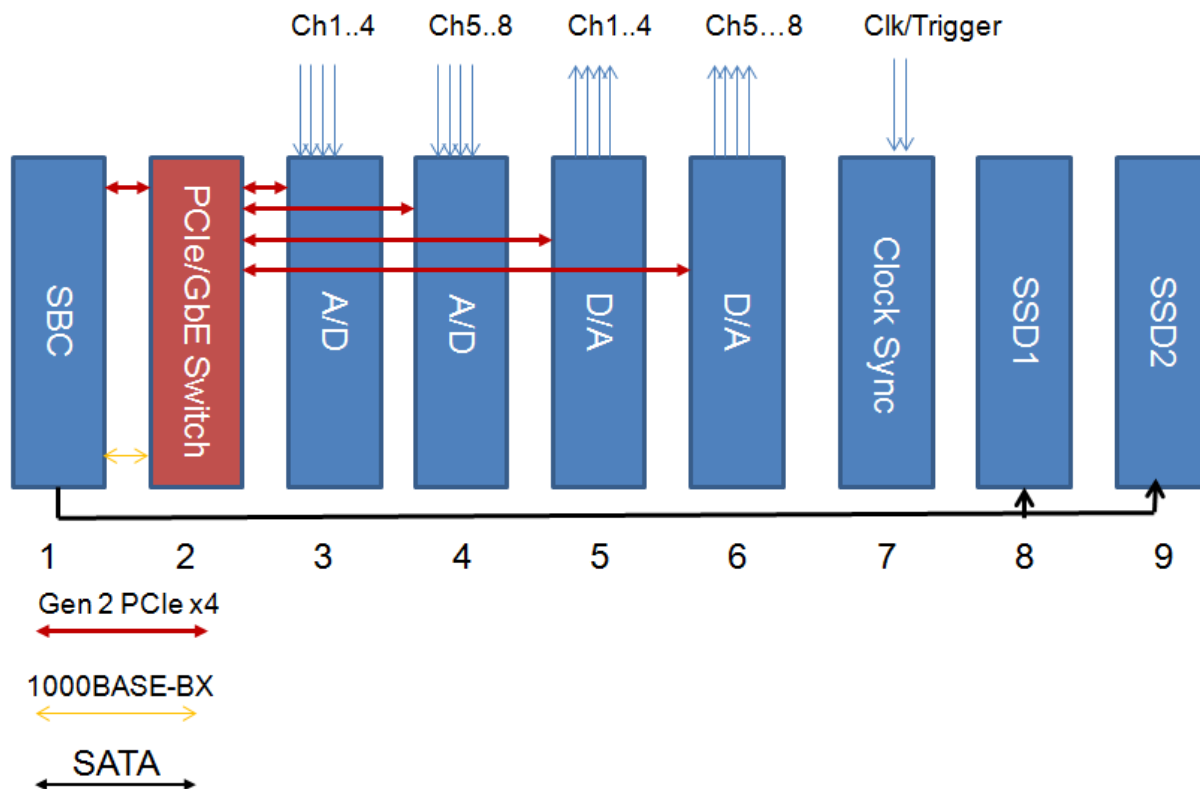
- Array Radar
- Beam Forming
- Software Defined Radio

-plane and Gigabit Ethernet for control-plane communications.

A high-density SSD is used as storage module. Up to 4TB SSD can be supported in a two-slot space configuration.

It pre-installs Linux or Windows OS and a suit of signal acquisition software is developed so customer can use the system out-of-box. User can view the signal in time and spectrum domain before and during the acquisition.

Customised development service may be provided upon request and technical support services are provided.



Ordering Information:

VPX390-	3U OpenVPX base platform, Intel 3 rd Gen i7 SBC, 8GB DDR3 SDRAM.
Opt-104	4Ch 16bit 200MS/s A/D, w/ DDC.
Opt-108	8Ch 16bit 200MS/s A/D, w/ DDC.
Opt-108H	8Ch 12bit 1.8GS/s A/D, w/ wideband DDC.
Opt-116	16Ch 16bit 200MS/s A/D, w/ DDC.
Opt-204	4Ch 16bit 1.25GHz D/A, w/ DUC.
Opt-208	8Ch 16bit 1.25GHz D/A, w/ DUC.
Opt-216	16Ch 16bit 1.25GHz D/A, w/ DUC.
Opt-300	4TB SSD.
Opt-RF	RF Slot Down-converter.

Please contact us at sales@DynamicC4.com or +65 9338 2201 for product information and other option combinations.

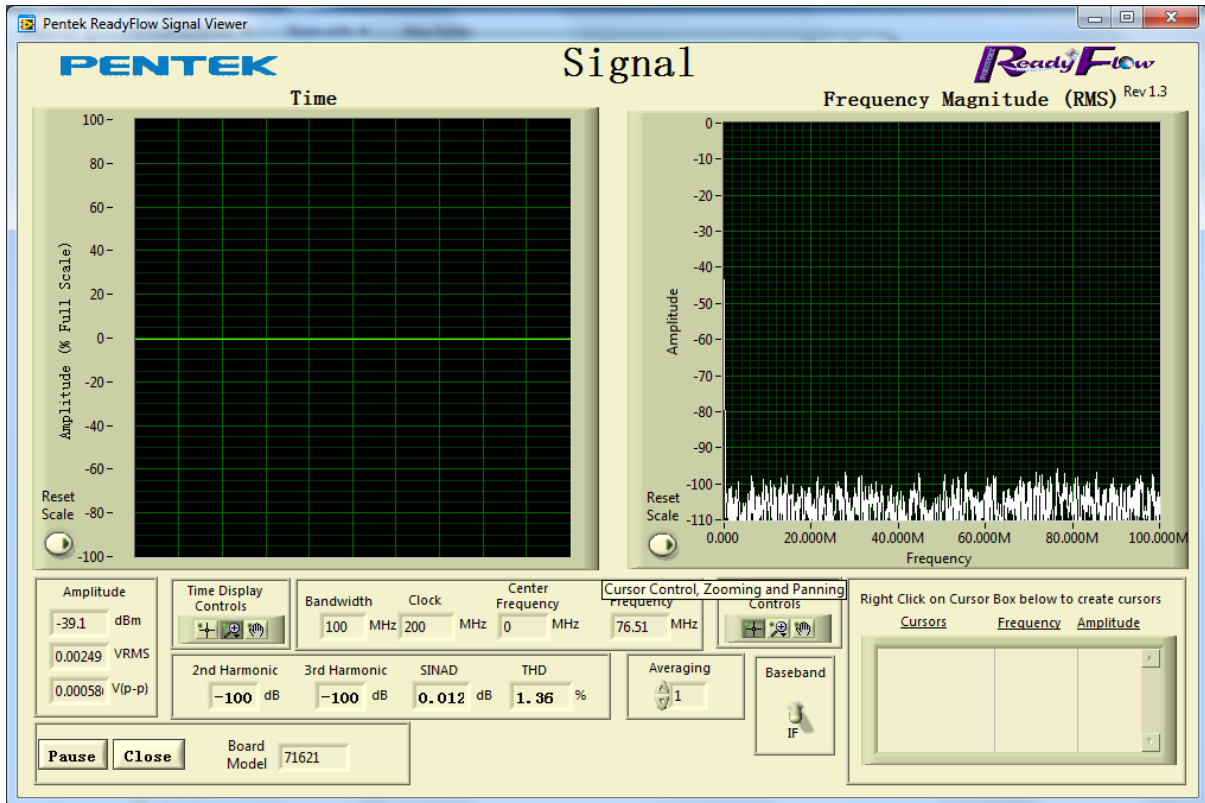


Figure 1: ADC display, 100MHz BW, no signal input.

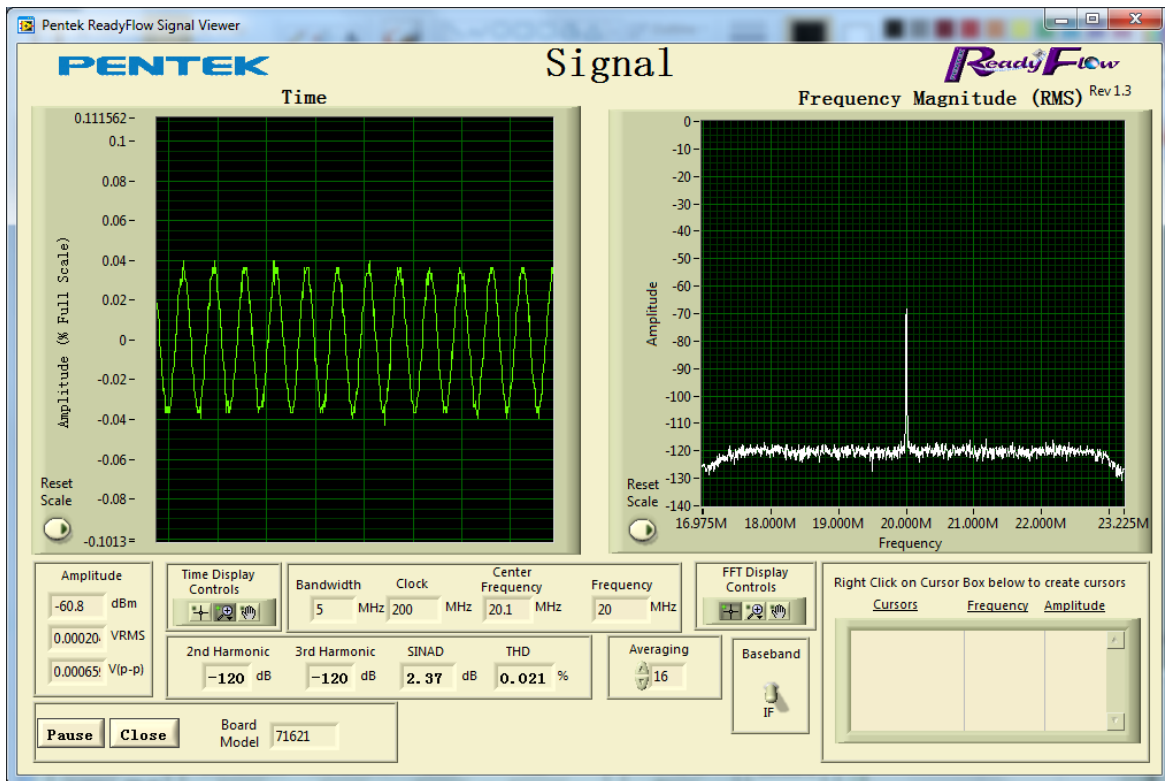


Figure 2: DDC display, -60dBm input, tuning to 20MHz.