INVENTAMI

SBC Platform

- ✓ Freescale i.MX6Dual/Quad, ARM® Cortex™-A9 core @ 1GHz
- ✓ 1 GByte DDR3L 64 Bit
- ✓ Mini HDMI and LVDS + Touch display
- ✓ 1 Micro USB OTG, 2 USB 2.0 type A (500mA each)
- ✓ 1 micro SD card, 1 eMMC,1 mSATA,1 mPCIe
- ✓ 1 microsim slot for GSM/LTE
- ✓ Up to 2 Ethernet RJ45 (10/100/1000 MBit)
- ✓ Analog Audio and Mic jacks
- ✓ SPI, 2xCAN, i2c, 3xCMOS UART, 1xRS232 UART, GPIOs
- ✓ Lauterbach compatible MIPI60 connector with JTAG and TRACE
- ✓ Lattice ECP5 user FPGA with up to 85K Logic element
- ✓ 512 MByte DDR3 FPGA memory
- ✓ HIGH SPEED B2B connectors (12,8 Gbps)
- ✓ Compact size

Description

INVENTAMI is a powerful **single board computer (SBC)** based on a Freescale **i.MX6 SOC** paired with a Lattice **ECP5 FPGA**.

It can be used either as a general purpose prototyping board or as an embedded SBC: its features and the computational power of the CPU together with the unlimited flexibility of the FPGA make INVENTAMI a one-step-ahead candidate for a great range of applications.

Moreover INVENTAMI platform natively supports high performance stereo video acquisition and processing applications with two input sensor interfaces and a specific 512 Mbyte image buffer, extending the CPU video capture features.

The platform supports SATA card for storage solutions, PCIExpress and up to two Gigabit Ethernet interfaces for fast data transfer.

Video Output is provided over either HDMI or LVDS with display interface. Expansion connectors are available with GPIOs and a high speed board-to-board link.

BSP and custom drivers are open-sources.

Possible applications include machine vision, security and surveillance, medical diagnosis tools, smart traffic system.

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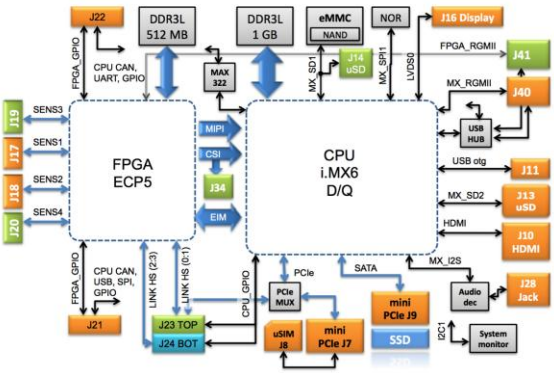
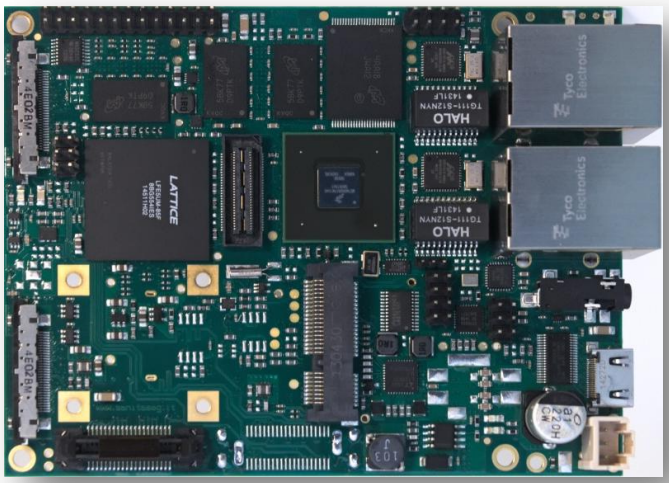
INVENTAMI Specifications

Find more @
inventami.com





	Entry Version	Full Version
CPU	Freescale i.MX6 Dual @1GHz	Freescale i.MX6 Quad @1GHz
CPU Memory	1 GByte DDR3	1 GByte DDR3
Storage	4 Gbyte eMMC	16 Gbyte eMMC
FPGA	Lattice ECP5U 85	Lattice ECP5UM 85 with SERDES
FPGA Memory	512 MByte DDR3	512 MByte DDR3
Front Panel Connectors	Mini HDMI	Mini HDMI
	LVDS Touch Screen	LVDS Touch Screen
	Audio	Audio
	USB OTG	USB OTG
	USB	USB (2)
	Ethernet CPU	Ethernet CPU
	-	Ethernet FPGA
	Micro SD	Micro SD
Expansion Connectors	mPCIe x1	mPCIe x1
	Sim card	Sim card
	mSATA	mSATA
High Density Connectors 0.5 mm	40 GPIO, 1USB	44 GPIO, 1USB, 6.25Gbps, PCIe
Low Density Connectors 2.54 mm	1 RS232 (+CTS/RTS), 3 CMOS UART, 6 GPIO, 1 CAN	1 RS232 (+CTS/RTS), 3 CMOS UART, 6 GPIO, 1 CAN
Sensor Connectors	2 LVDS Cable 800MB/s	2 LVDS Cable 800MB/s, 2 LVDS FCC 800MB/s
Debug Connector	FPGA JTAG	FPGA JTAG Lauterbach MIPI60 JTAG+TRACE
Power Supply	7-24 VDC	7-24 VDC
Power Consumption	<15W	<15W
Working Temperature	> +5°C; < +55°C	> +5°C; < +55°C
Board size (H x L x P)	116 x 92 x 31	116 x 92 x 31
BSP	Linux (Yocto, Ubuntu)	Linux (Yocto, Ubuntu)
Open-source FPGA IP Cores	Register Bank, I2C	Register Bank, I2C

V2.2