

Highly Scalable Multimedia SBC “phyBOARD-Subra i.MX6” Solo/Dual/Quad Core ARM Cortex-A9



What is phyBOARD - Subra?

The phyBOARD -Subra for phyFLEX-i.MX6(SOM) is a low-cost, feature-rich software development platform Supporting the Freescale Semiconductor i.MX6 microcontroller. Moreover due to numerous standard interfaces, phyBOARD-Subra-i.MX6 can serve as bedrock for your application. At core of phyBOARD-Subra is the PFL-A-02 / phyFLEX- i.MX6 **System On Module (SOM)** containing the processor, DRAM, NAND Flash, Power regulation, supervision, transceivers and other core functions required to support i.MX6 processor. Surrounding the SOM is the PB-0301-xxx/phyBOARD-Subra carrier board, adding power input, buttons, connectors, signal breakout and Ethernet connectivity amongst other features.

phyBoard – Subra Features

SOM

- phyFLEX-i.MX6
- **Solo/Dual/Quad Core**
- ARM® Cortex™-A9 800MHz upto 1.2GHz
- 512 MB DDR3 RAM (Max 4GB)
- 512 MB NAND (Max 16GB)
- 8 MB NOR FLASH (optional)

OnBoard Devices

- 2 x USB Host
- 1 x 10/100 /1000 Ethernet
- 2 x button Reset / Power On
- Real Time Clock with Goldcap
- Micro SD Card

Display Interface

- Standard LVDS Interface
- HDMI

Communication Interfaces

- 1 x RS232
- 2 x UARTs
- 1 x I²C
- 1 x SPI
- 1 x CAN Interface
- 4 x Digital IO's
- PhyCAM-S interface(Camera)

Expansion Connectors *

- GPIOs
- JTAG
- 2.4 GHz IEEE 802.11 b/g/n and Bluetooth wireless adapter

General

- Form Factor: 150 x 90 mm
- Power: 24V DC

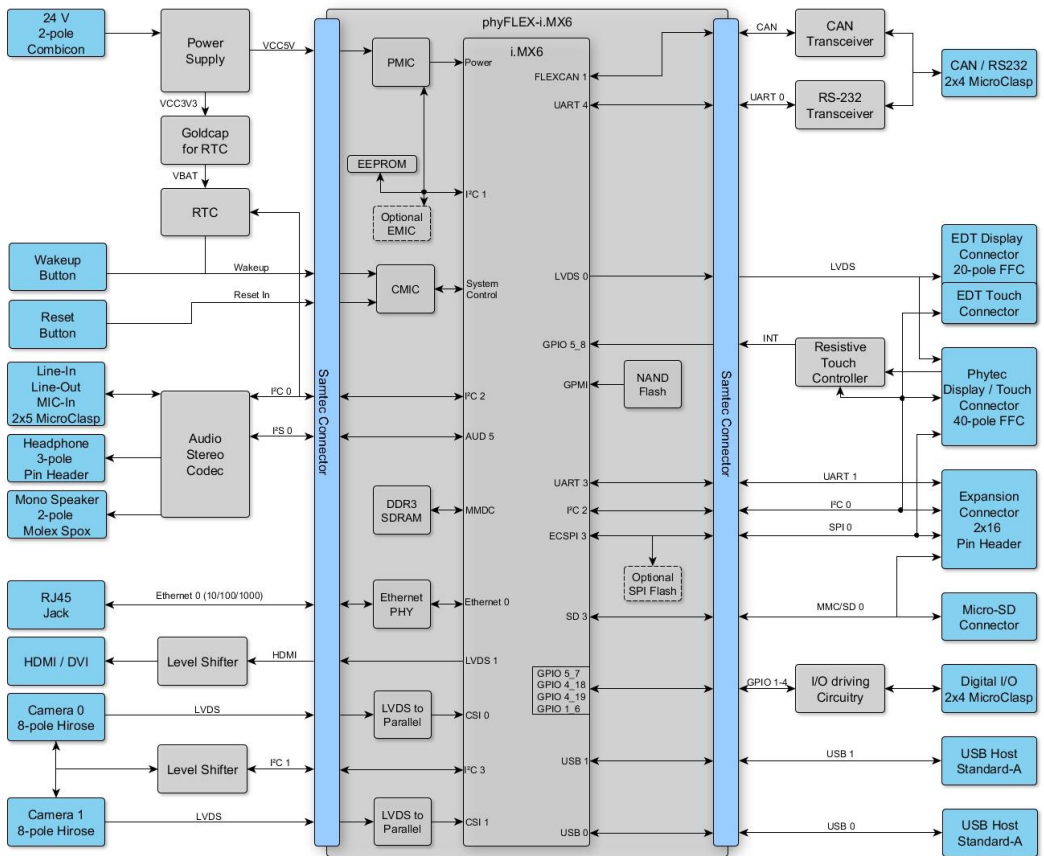
Note*: All the Pins in expansion Connector are multiplexed

Application:

PHYTEC SOMs have been deployed in thousands of systems across a wide variety of industrial verticals like:

- Building Automation
- Green Computing
- Medical equipment
- Security
- High-tech farming
- Industrial Automation
- Smart energy system
- Military and Aerospace
- Fitness equipment
- TMI and Transportation

Block Diagram:



Documentation & Software

- Hardware Manual
- Software Manual
- Quick Start Guide

Optional Accessories / Add-ons

- Accessories (Power Adapter, Serial Cable, Ethernet Cable, Patch Card)
- 7" LCD with Touch (Resistive / Capacitive)
- GPS/GPRS Module
- Wi-Fi / BT
- RS 485 Break out Board

Package Contents

- phyBOARD-Subra Carrier Board
- phyFLEX-i.MX6 SOM
- DVD (includes Documents & Board Support Package)

BSP Sources

- Linux
- Android
- Windows CE7
- Qt

Support

- Wiki
- Forum
- Community
- Premium Support