POLYHEX

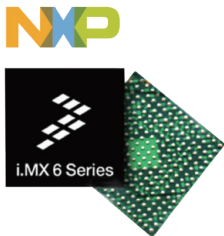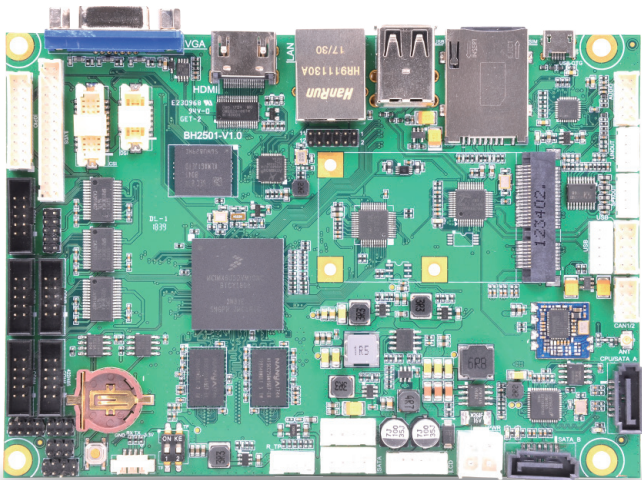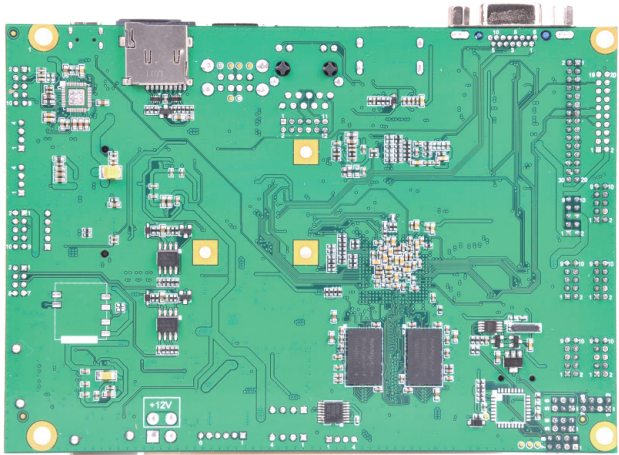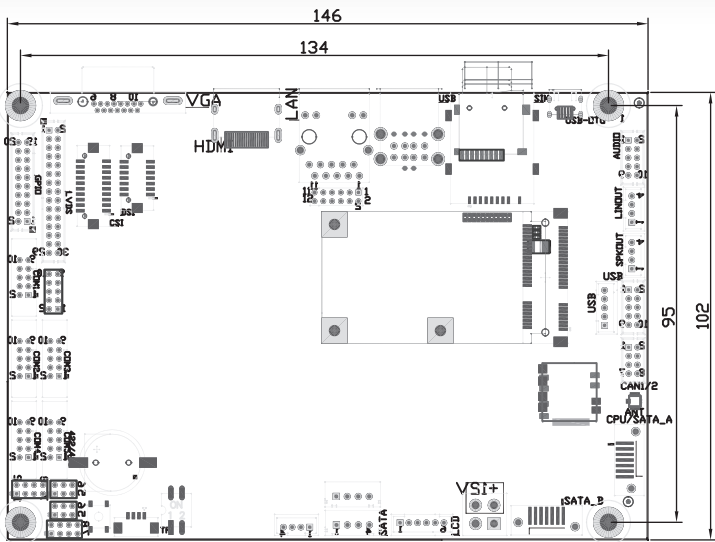# 3.5inch NXP i.MX 6DualLite ARM Cortex-A9 Motherboard

· NXP i.MX 6DualLite ARM Cortex-A9 processor
· Onboard DDR3 1066MHz 1GB memory and 8GB EMMC NAND flash (default)
· Supports Triple Display: VGA/HDMI/LVDS
· Supports 1x mini-PCIe, 4x RS232, 1x RS485, 5x USB2.0, 2x CAN, 1x SIM, 1x Micro SD slot
· 3.5 inch mini size, low power consumption
· Supports Embedded Linux Yocto 2.1.3, Ubuntu 14.04, Android 7.1

NXP
i.MX 6 Series

SGS SGS CE FC RoHS 2002/95/EC CCC

Structure Diagram

146
134
95
102

VGA
LAN
USB
SIM
USB-OTG
HDMI
AUDIO
LINOUT
SPDIFOUT
USB
USB
CAN1/2
CPU/SATA_A
VSI+
SATA_B
SATA
LCD
+12V
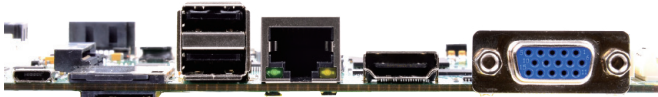
Ordering Information

Part Number	CPU	RAM	Storage	Display	GbE	USB	Audio	Mini-PCIe	SATA	Operating Temp
EMB-NMX6DL-F11	NXP i.MX6 Dual Lite 1.0GHz	1G DDR3	8G eMMC	HDMI + VGA + LVDS	1	5 USB 2.0 1 Mcro USB	1	1	2	-20~70℃

Technical Specifications

Category	Item	Specification
Core System	Processor	NXP i.MX6 Solo
		NXP i.MX6 Dual Lite 1.0GHz (Default)
		NXP i.MX6 Dual
		NXP i.MX6 Quad
	Architecture	ARM Cortex-A9
	Memory	Onboard 1GB DDR3(Default), up to 2GB
	Storage	eMMC 8GB (Default),16G/32G(option)
Expansion Interfaces	Expansion Slots	1x mini-PCIe with SIM Card Slot
Connectivity	Network LAN	1 x RJ45 AR8033
	WiFi	1x RTL8188WEUS
	Bluetooth	1x RTL8723 (optional)
Internal Headers	Internal Display	1x Dual channel 8bit LVDS (expansion header)
	Expansion Headers	2x Sata and Sata Power
		1x DSI
		1x CSI
		4x RS232, 1x RS232/RS422/RS485
		3x USB2.0
		1x Power
		1x GPIO
		2xCAN
		1x SPK(L&R)
		1x Audio(Mic IN, HP Out, Line In)
		1x RTP(4wire TouchPanel)
		1x RTC
External Connectors	External Display	1x VGA, 1x HDMI
	Network	1x RJ45 AR8033
	USB Host	2x USB 2.0
	SIM Card Slot	1x SIM
	SD Card Slot	1x microSD card slot
	USB OTG	1x Micro USB
Audio	Audio Codec	NS4258T (optional ALC5640)
Power Specifications	Power Input	12V DC
	Power Consumption	Depending on Configuration
Mechanical & Environmental	Dimensions	146 x 102 x 1.6 mm
	Size	146mm x 102mm (L x W)
	Weight	115g
	Temperature	Commercial: 0° to +60° C
		Extended: -20° to +70° C
		Industrial: -40° to +85° C
	Relative Humidity	10 to 90 %
	MTBF	>100 000 Hours
	Shock	50G/25ms
	Vibration	20G/0-600Hz
Operating System		Embedded Linux Yocto 2.1.3, Ubuntu 14.04, Android 7.1

ABOUT POLYHEX

As a board level and system level designer and manufacturer, Polyhex, with 9 years' experience, always delivers best-in-class embedded computing solutions based on both ARM and X86 architecture, including hardware customization and software debugging etc. Partnered with silicon venders like Intel, NXP, ST, Rockchip, Allwinners and so on, we have earned trust from clients worldwide in over 30 countries. Polyhex is also certified with ISO9001 and ISO13485 for the self-owned manufacture facility.

POLYHEX
Beyond the Embedded Deployment