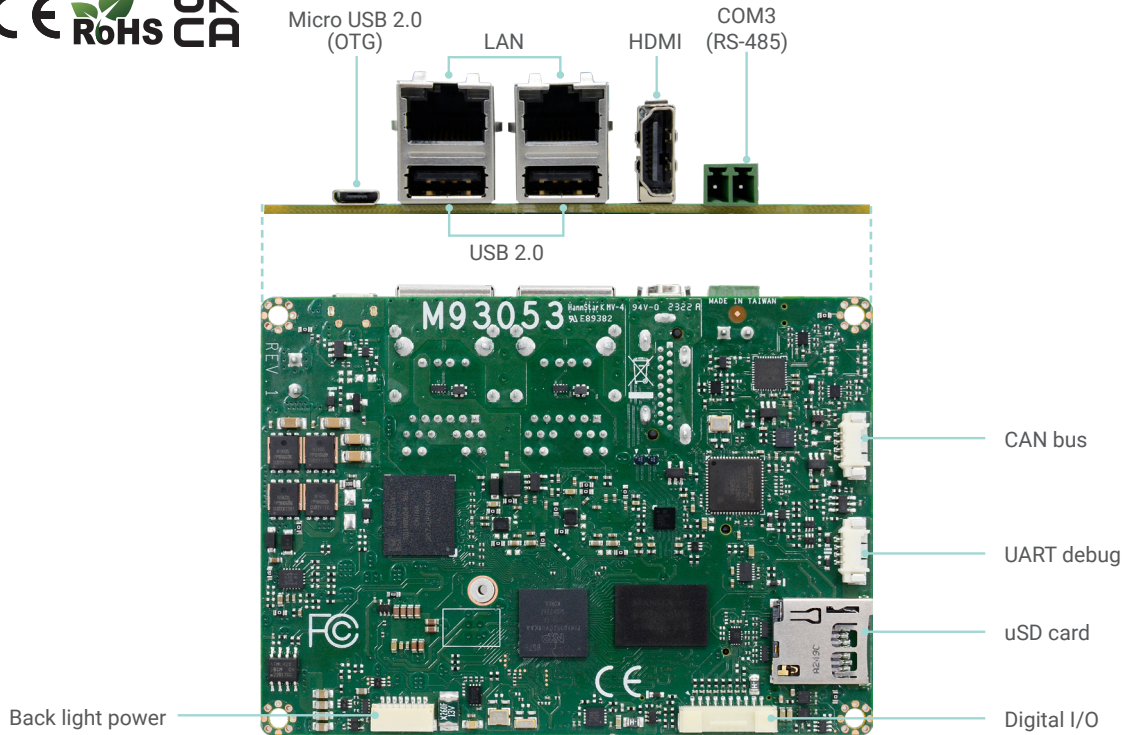


M93053

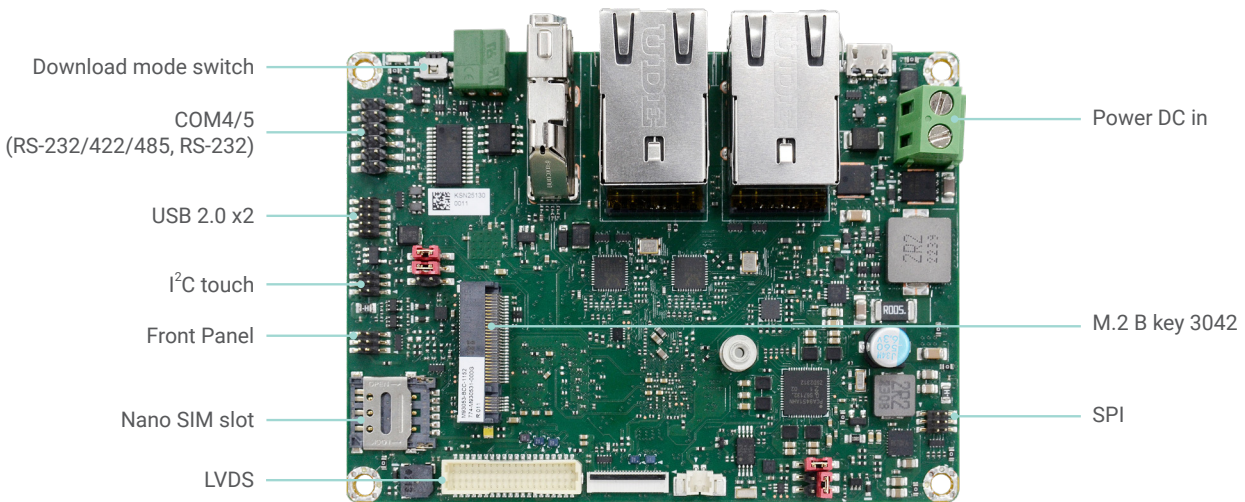
ARM



NXP i.MX93 series
2.5" SBC

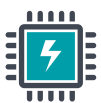


Bottom View



Top View

KEY FEATURES



NXP i.MX93 platform

Target on entry level application



Wide Voltage

Support 9~36VDC



2 GbE LAN

For automation application



CAN bus

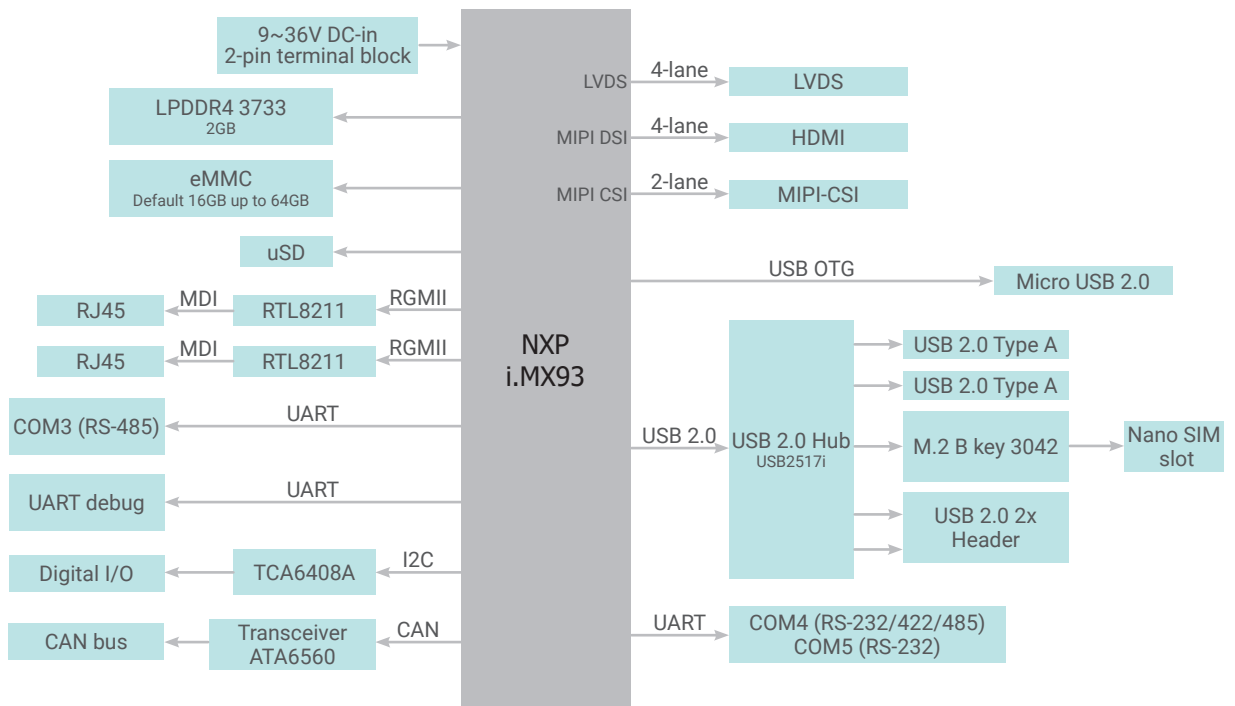
For automation equipments integration



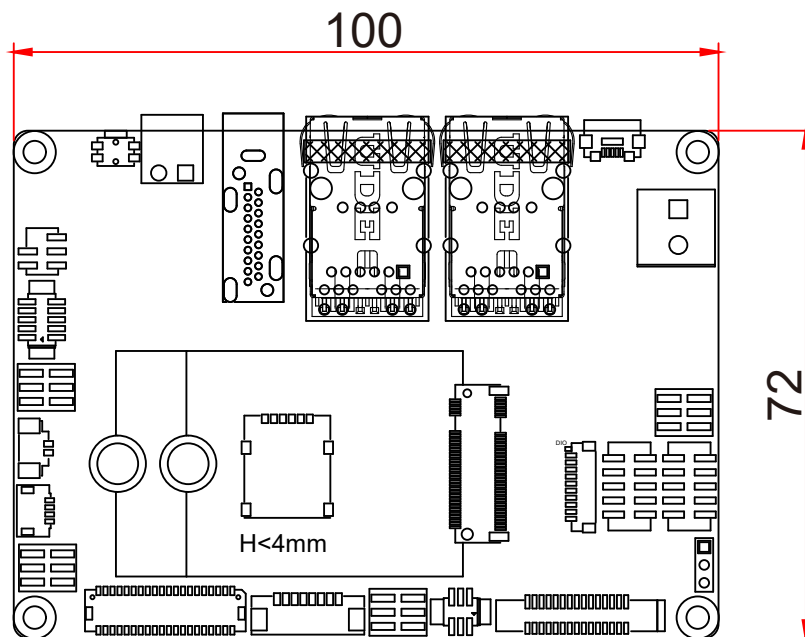
M.2 Expansions

1 M.2 B key 3042

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

SYSTEM	Processor	i.MX 93 applications processors MIMX9352DVVXMAB, Dual core, 1.7GHz, NPU, 0°C~95°C MIMX9352CVVXMAB, Dual core, 1.7GHz, NPU, -40°C~105°C		
	Memory	2GB LPDDR4 Memory Down		
GRAPHICS	Controller	2D Graphics: PXP Engine		
	Feature	Blending/Composition, Resize, Color Space Conversion		
	Display	1 x HDMI 1.4	HDMI: resolution up to 1920x1080 @60Hz	
		1 x LVDS	LVDS: resolution up to 1366x768 @60Hz	
Dual Display	LVDS + HDMI			
STORAGE	eMMC	1 x eMMC 5.1 with default 16GB (up to 64GB)		
EXPANSION	Interface	1 x M.2 B key 3042 (USB 2.0)		
		1 x Nano SIM slot		
ETHERNET	Phy	RTL8211		
REAR I/O	Ethernet	2 x GbE (RJ-45)		
	Serial	1 x RS485 (2-wire)		
	USB	2 x USB 2.0		
		1 x Micro USB 2.0 (OTG)		
	Display	1 x HDMI		
Download Mode Switch	1 x Download mode switch			
INTERNAL I/O	Serial	1 x RS232, 1x RS232/422/485 on 2x6 header		
	USB	2 x USB 2.0		
	Display	1 x LVDS LCD Panel connector (Default: 12V/Opt.: 5V)		
		1 x LCD Backlight Power (Default: 5V/Opt.: 3.3V)		
	SD	1 x uSD card		
	DIO	1 x 8-bit DIO		
	I ² C	1 x I ² C / Touch		
	CANBus	1 x CAN bus 2.0b		
Others	1 x SPI, 1 x Front Panel, 1 x UART debug			
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds		
POWER	Type	Wide Range 9~36VDC		
	Connector	2-pole terminal block		
	Consumption	TBC		
	RTC Battery	CR2032 Coin Cell		
OS SUPPORT	Linux	Linux Yocto 4.0 (Kernel 5.15.71)		
ENVIRONMENT	Temperature	Operating: -5°C ~ 65°C (-30°C ~ 80°C, TBC)	Storage: -40°C ~ 85°C	
	Humidity	Operating: 5% ~ 90% RH	Storage: 5% ~ 90% RH	
	MTBF	TBC		
MECHANISM	Dimensions	2.5" SBC Form Factor	100mm (3.94") x 72mm (2.83")	
	Height	PCB: 1.6mm		
		Top Side: TBC		
		Bottom Side: TBC		
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC, RoHS, UKCA		

ORDERING INFORMATION

Model Name	P/N	Processor	Memory	eMMC	GbE	RS-485	RS-232	RS-232/422/485	USB 2.0	Power	Thermal	Temp.
M93053-BCC-2152	770-M930531-000G	Dual core	2 GB	16 GB	2	1	1	1	5	9~36VDC	Fanless	-5°C ~ 65°C

PACKING LIST

1 M93053 board	
1 Terminal block for RS485 (COM3)	342-361021-000G
1 Heat spreader (Height: 11mm)	A71-808354-000G

OPTIONAL ITEMS

2 pole terminal to DC jack cable	A81-004013-000G
Power adapter (60W, 12V, DC Jack)	671-106012-000G
USB 2.0 cable (Length: 200mm)	A81-001084-016G
COM port cable (Length: 250mm, COM4/5 port)	A81-015088-016G
Debug console with cable (Length: 500mm)	770-IMX8M1-000G