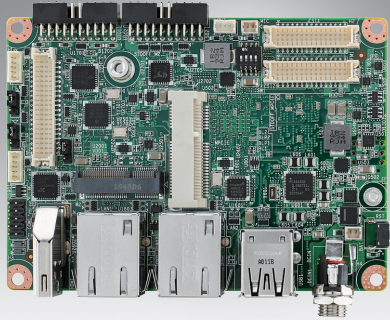


RSB-3720

NXP i.MX8M Plus Cortex®-A53 2.5" SBC with UIO40-Express

NEW



Features

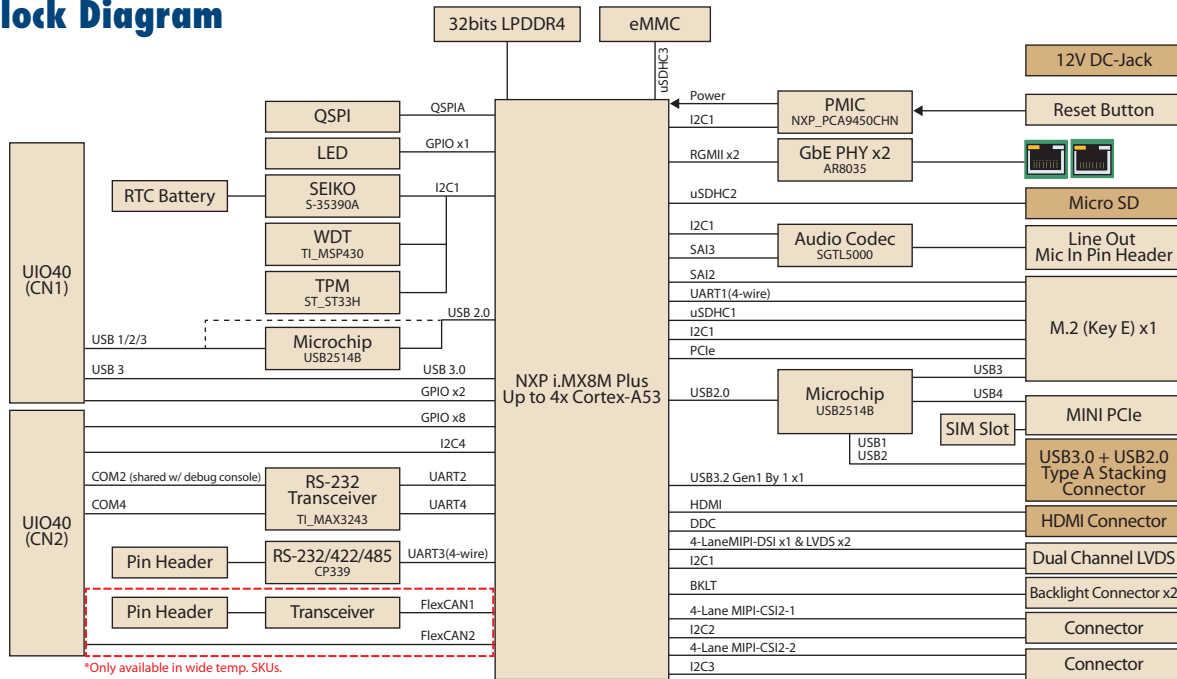
- NXP Arm® Cortex®-A53 i.MX8M Plus Quad/Dual up to 1.8 GHz
- Onboard LPDDR4 6 GB, 4000MT/s memory
- HDMI 1920x1080 at 60Hz, 1 Single or 1 Dual Channel 24 bit LVDS (or 1 4-Lane MIPI-DSI by BOM Option)
- 1 4-wire RS-232/422/485, 1 USB3.2 Gen1 By 1, 1 USB2.0, 1 Micro SD, 1 Mic. in / Line out
- 1 mini-PCIe for 3G/4G, 1 M.2 2230 Key E Slot
- UIO expansion 1 USB3.2 Gen1 By 1, 3 USB2.0, 10 GPIO, 2 2-wires UART, 1 CAN, 1 I2C
- Supports Yocto Linux and Android



Specifications

Form Factor		2.5" SBC with UIO40-Express
Processor System	CPU	NXP i.MX8M Plus Cortex-A53 Quad/Dual core (up to 1.8GHz)
	Technology	LPDDR4 4000MT/s
Memory	Capacity	On-board 6 GB
	Flash	16 GB eMMC Flash for O.S. and 8 MB QSPI NOR Flash for board information
NPU	NPU	2.3 TOP/s Neural Network performance
Graphics	HDMI	1 HDMI 2.0, 1920 x 1080 at 60Hz
	LVDS	1 Single Channel or 1 Dual Channel 24 Bit LVDS, Backlight power, 5/12V, Max. 1A
	MIPI-DSI	1 4-Lane MIPI-DSI (shared with LVDS connector) by BOM option
	Graphics Engine	GC7000UL with 2D/3D Graphic Acceleration supporting 1G Pixel/s, OpenVG 1.1, Open GL ES3.1, Vulkan, and Open CL 1.2 FP.
	H/W Video Codec	Decoder: 1080p60 HEVC/H.265 Main, VP9 Profile 0/2, VP8, AVC/H.264 Baseline/Main/High Encoder: 1080p60 AVC/H.264, HEVC/H.265
Ethernet	Chipset	NXP i.MX8M Plus integrated RGMII
	Speed	2 10/100/1000 Mbps
WatchDog Timer	WatchDog Timer	1~6553s, power on/off 4s
I/O	USB	1 USB3.2 Gen1 By 1 Host, 1 USB2.0 Host
	Audio	1 Mic. in / Line out by pin header
	CAN-FD	1 CANbus pin header (support CAN-FD)
	Serial Port	1 4 wires RS-232/422/485 by pin header
	Camera Input	2 4-Lane MIPI-CSI2
	UIO40	1 USB3.2 Gen1 By 1, 3 USB2.0, 10 GPIO, 2 UART (one shared with debug console), 1 CAN-FD, 1 I2C
Indicator	LED	1 Power LED 1 Programmable LED
Expansion	Mini PCIe	1 Full Size Mini PCIe Slot (USB Signal Only)
	M.2	1 M.2 2230 Key E Slot (USB/PCIe/SDIO/UART/I2S)
	SD Socket	1 Micro SD Socket
	SIM Slot	1 Nano SIM Slot
Power	Power Supply Voltage	+12 V
	Power Type	Lockable DC-Jack (2pin type connector by BOM option)
	Power Consumption	7.13W
Environment	Operating Temperature	0 ~ 60 °C / -40 ~ 85 °C
	Operating Humidity	5%~95% Relative humidity, non-condensing
Mechanical	Dimensions	100 x 72 x 19 mm
	Weight	0.05kg
Operation System		Yocto Linux & Android
Certifications		CE/FCC Class B

Block Diagram



Ordering Information

Part No.	CPU	Memory	Flash Memory	HDMI	LVDS	LAN	USB Host	SD	CANbus	Operating Temperature
RSB-3720CD-ANA1E	NXP i.MX8M Plus Dual 1.8 GHz	6 GB	16 GB	1	2	2	2	1	-	0 - 60 °C
RSB-3720WD-ACA1E	NXP i.MX8M Plus Dual 1.6 GHz	6 GB	16 GB	1	2	2	2	1	1	-40 - 85 °C
RSB-3720CQ-ANA1E	NXP i.MX8M Plus Quad 1.8 GHz	6 GB	16 GB	1	2	2	2	1	-	0 - 60 °C
RSB-3720WQ-ACA1E	NXP i.MX8M Plus Quad 1.6 GHz	6 GB	16 GB	1	2	2	2	1	1	-40 - 85 °C

Packing List

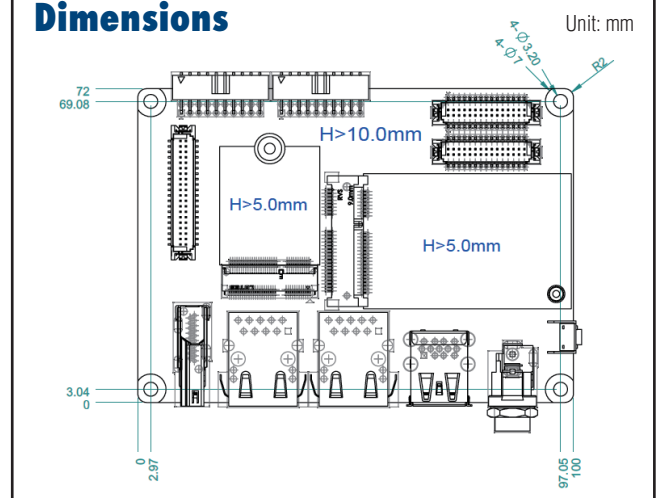
Part Number	Description
96963720000	RSB-3720 2.5" SBC

Optional Accessories

Part Number	Description
96PSA-A36W12R1-3	ADP A/D 100-240V 36W 12V C6 DC PLUG 90° 62368
TBD	UIO20 extending cable of RSB-3720 for 3USB&2GPIO
1700030307-01	UIO40 extending cable of RSB-3430, 3COM&8GPIO
1700031429-01	Line out cable
1700026878-01	Mic. in cable
1700001524	Power Cord 3P UL 10A 125V 180cm
170203183C	Power Cord 3P Europe (WS-010+WS-083) 183cm
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
1700008921	Power Cord 3P PSE 183cm
1700009652	Power Cord CCC 3P 10A 250V 187cm
1700019474	Debug Cable
96LEDK-A070WW40NB1	LVDS 7" Panel G070VW01 V0 (VDD: 3.3V, Backlight Power: 12V)
1700021883-01	LVDS Cable
EWM-W163M201E	802.11 a/b/g/n/ac, QCA6174A, 2T2R, w/BT4.1, M.2 2230
1750008717-01	Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK
1750007965-01	Antenna Cable R/P SMA (M) to MHF4, 300mm
EWM-C117FL06E*	LTE 4G, 3G WCDMA/DC-HSPA+, 2G module, MPC1-L280H
1750008303-01	Antenna AN0727-64SP6BSM
1750006009	Antenna Cable SMA (F) to MHF 1.32 25cm

* Please contact us to get suitable cellular module for your region.

Dimensions



External I/O

