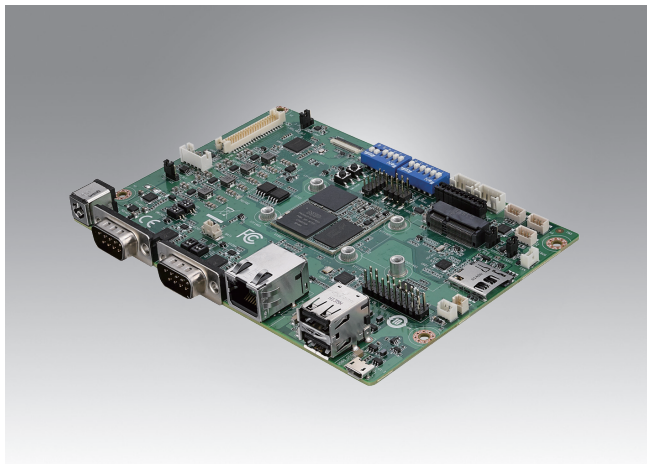


ROM-2620 Evaluation Kit

Development Kit for OSM 1.1 Computer-on-Module ROM-2620



Features

- NXP Arm® Cortex®-A35 i.MX 8ULP Dual up to 1.0 GHz
- 1 x Arm Cortex-M33 core
- Onboard LPDDR4 1GB, 2000MT/s memory
- 1 x 4 lane MIPI-DSI or 1 x Dual channel LVDS
- 1 x USB2.0, 1 x USB 2.0 OTG, 5 x UART, 2 x I2C, 24 x GPIO, 6 x PWM, 1 x CAN
- Ultra small size form factor - OSM
- Support Yocto Linux

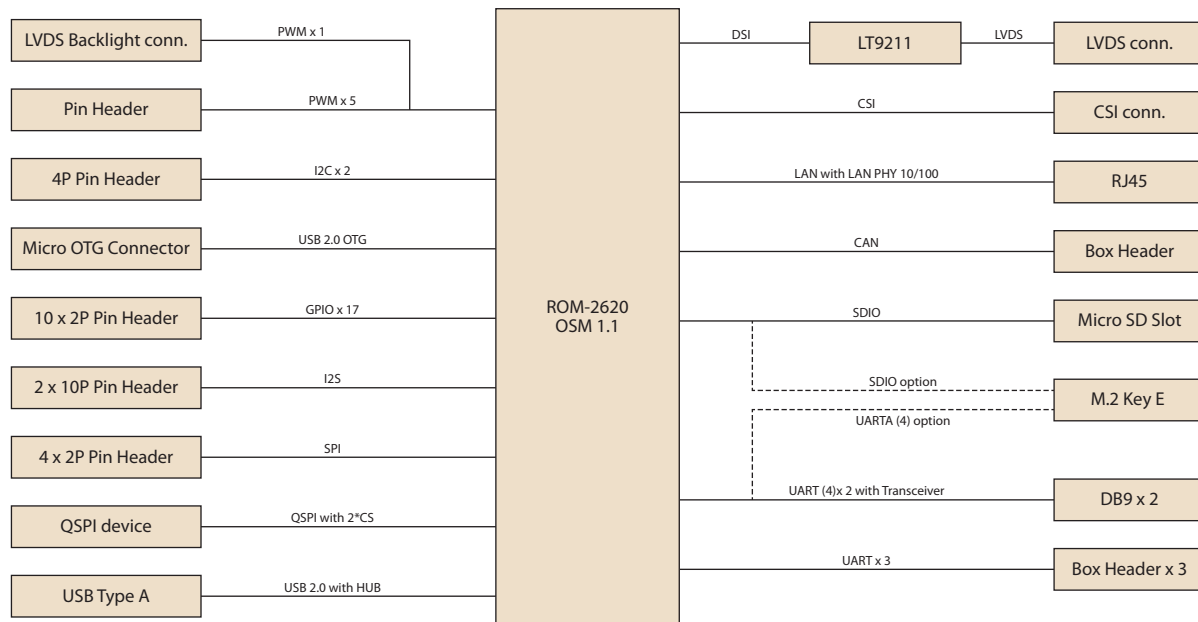


Specifications

Form Factor		ROM-2620 OSM Evaluation Kit	
Processor System	CPU	NXP i.MX 8ULP Cortex-A35 Dual core (up to 1.0GHz)	
	MCU	1 x Arm Cortex-M33 core	
Memory	Technology	LPDDR4 2000MT/s	
	Capacity	On-board 1GB	
	Flash	16 GB eMMC NAND Flash for O.S.	
Graphics	LVDS/MIPI DSI	1 x 4 lane MIPI-DSI or 1 x Dual channel LVDS	
	HDMI	-	
	Parallel RGB	-	
	VGA	-	
	Graphics Engine	GC7000 nanoULTRA/GC328 with 2D/3D Graphic Acceleration supporting 1G Pixel/s, OpenVG 1.1, Open GL ES3.1, Vulkan, and Open CL 1.2 FP.	
Ethernet	Chipset	1 x NXP i.MX 8ULP integrated RMII	
	Speed	1 x 10/100 Mbps	
RTC	RTC	i.MX 8ULP internal RTC	
Security		NXP i.MX 8ULP integrated Trust Zone	
I/O from A-core	USB	2 USB Type A	
	USB OTG	1	
	Audio	Phone Jack (Mic in / Audio Out)	
	M.2	1 M.2 Key E Connector (USB, UART, SDIO Option)	
	COM		1 RS232/422/485 by DB9
			1 RS232 by pin header
	Console Port	1	
	GPIO	8	
	PWM	6	
	I2C	2 by Pin Header	
I/O from M-core	COM	1 RS232/422/485 by DB9	
	Console Port	1	
	GPIO	16	
	CAN	1	
Power	Power Supply Voltage	12V	
	Power Consumption	1.62W	
Environment	Operating Temperature	-40 ~ 85 °C	
	Operating Humidity	5 ~ 95% relative humidity, non-condensing	
Mechanical	Dimensions (W x D)	146 x 102 mm	
Operation System		Yocto Linux	
Certifications		CE/FCC Class B	

ROM-2620 Evaluation Kit

Block Diagram



Ordering Information

Part No.	Description
ROM-DK2620-F1A1E	ROM-2620 Evaluation Kit

Packing List

Part No.	Description
9696ED91000	ROM-ED91 OSM Carrier Board
9696MEG510E	ROM-EG51 A101 ASS'Y CODEC Board
ROM-2620WD-MDA1E	ROM-2620 OSM V1.1 module
96PSA-A36W12W7-5	ADAPTER 100-240V 36W 12V 3A
1700026878-01	M cable PH JACK D3.5/1x2P-1.25 15cm
1700031429-01	M Cable PH JACK D3.5/1x3P-1.25 15cm
1700021565-01	Debug cable 1x4P-1.25/D-SUB 9P(F) 60cm
1700019474	M Cable D-SUB 9P(F)/D-SUB 9P(F) RS232/RS485 100c
SQF-MSDM1-16G-21E	SQF MICRO SD C10 MLC 16G (-40~85°C)
1700023619-01	M cable USB-A 4P(M)/micro USB-B 5P(M) 100cm
1700021882-01	BKL cable 1x4P-1.25/1x5P-2.0 50cm
1700021883-01	LVDS cable 1x20P-1.0/2x20P-1.25 50cm

Optional Accessories

Part No.	Description
1700001524	Power Cord 3P UL 10A 125 V 180 cm
170203183C	Power Code 3P Europe (WS-010+WS-083)183cm
1700008921	Power Cord 3P PSE 183cm
170203180A	Power Cord 3P UK 2.5A/3A 250V 1.83M
EWM-W194M201E	802.11ac + BT 5.0 2T2R NXP88W8997 SDIO/UART
1750008717-01	Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK
1750007965-01	Antenna cable, SMA (M) to MHF4, 300mm
96LCM-G070WV40L-A0	7" LCD, 400nits, 800x480