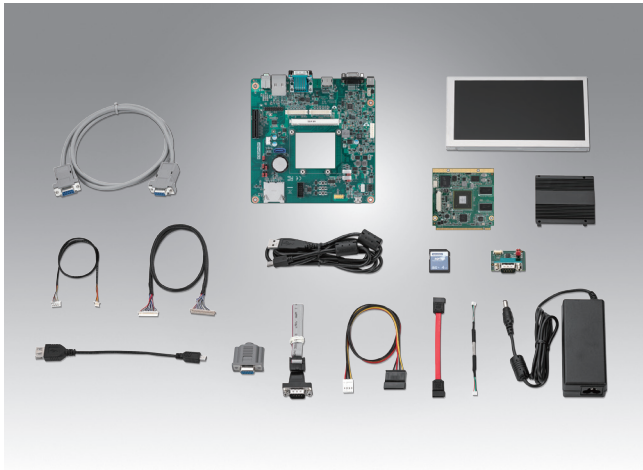


ROM-7421 Evaluation Kit

Development Kit for Qseven 2.0 CPU
Module ROM-7421



Features

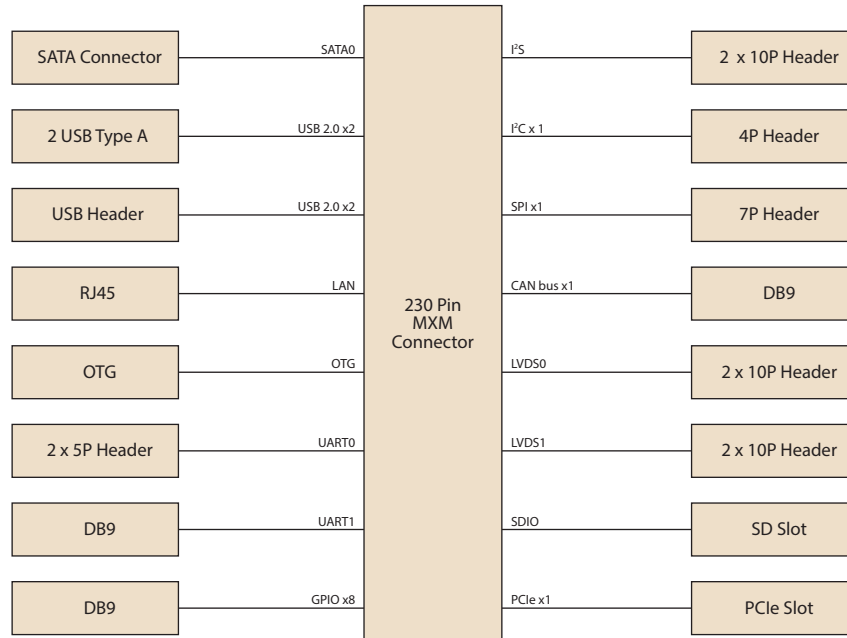
- Evaluation kit for ROM-7421
- Enhanced performance NXP i.MX6 Dual Plus 1GHz processor
- Onboard DDR3 1GB memory and eMMC 4GB
- HDMI, Dual channel 24bit LVDS, 1920 x 1080
- Supports 4 GB eMMC Flash, 1 SD/MMC, 1 SATA
- Supports 1 PCIe, 1 GbE, 4 USB 2.0, 1 USB OTG2.0, 1 SATAII, 1 I²C, 1 I²S, 1 Camera in, 1 CANbus, 8 GPIO
- Cable pack & panel included
- Evaluative image & test utility built-in



Specifications

Form Factor		ROM-7421 Evaluation Kit
Processor System	CPU	NXP ARM Cortex-A9 i.MX6 Dual Plus 1 GHz
Memory	Technology	DDR3 1066 MHz
	Capacity	On-board DDR3 1 GB
	Flash	4 GB eMMC NAND Flash for O.S. and 4 MB SPI NOR Flash for Advantech boot loader
Graphics	LVDS	1 Dual 24-bit LVDS, 1920 x 1080 at 60Hz
	HDMI	1920 x 1080 at 60Hz
	Parallel RGB	-
	VGA	-
	Graphics Engine	2 IPU. OpenGL ES 2.0 for 3D, BitBlit for 2D and OpenVG 1.1
	H/W Video Codec	Decoder: MPEG-4 ASP, H.264 HP, H.263, MPEG-2 MP, MJPEG BP Encoder: MPEG-4 SP, H.264 BP, H.263, MJPEG BP
Ethernet	Chipset	NXP i.MX6 integrated RGMII
	Speed	1 10/100/1000 Mbps
RTC	RTC	Yes
WatchDog Timer		HW Watchdog Timer
I/O	PCIe	1 PCIe x 1
	SATA	1 SATAII
	USB	4 USB 2.0, 1 USB 2.0 OTG
	Audio	1 Line in, 1 Audio out
	SPDIF	-
	SDIO	1 SD card slot
	Serial Port	2 RS-232 (4-wire)
	SPI	1
	CAN	1 CAN bus 2.0B
	GPIO	8
	I ² C	1
	Camera Input	1 MIPI v1.0, 4x Lane
	System Bus	-
	Touch	-
Keypad	-	
Power	Power Supply Voltage	12V DC Jack
	Power Consumption	6.25W (Max)
Environment	Operating Temperature	0 ~ 60 °C
	Operating Humidity	5% ~ 95% relative humidity, non-condensing
Mechanical	Dimensions (W x D)	170 x 170 mm
Operating System		Linux & Android
Certifications		CE/FCC Class B

Block Diagram



Ordering Information

Part No.	Description
ROM-DK7421-FOA1E	ROM-7421 Evaluation Kit

Packing List

Part Number	Description
9680015491	miniPCIe to PCIe adapter card MP2W-S-SMA V2.2a
9696ED2000E	ASS'Y ROM-ED20 DB A101-1
9696074200E	ASS'Y ROM-7421 A101 DUAL_1G,1G DDR3,4G NAND
9696750100E	ASS'Y ROM-DB7501 A101 Q7 i.MX6 Carrier Board
9696MEG510E	ROM-EG51 A101 ASS'Y CODEC Board For ROM-DB5900
96LEDK-A070WV40NB1	7" LED PANEL 400N 800X480(G)
96PSA-A36W12R1	ADP A/D 100-240V 36W 12V W/PFC DC PLUG 90°
SQF-ISDS1-4G-82C	SQF SDHC C10 SLC 4G, 1CH (0-70°C)
1700001524	Power Cord 3P UL 10A 125V 180cm
1700004711-11	M Cable SATA 7P/SATA 7P 8CM C=R 180/180
1700006911	M Cable USB-A 4P(F)/M-USB 5P(M) 11cm C=B
1700019077-11	M Cable USB-A 4P(M)/M-USB 5P(M) 150cm
1700019474	M Cable D-SUB 9P(F)/D-SUB 9P(F) RS232/RS485 100c
1700021882-01	A Cable 1*4P-1.25/1*5P-2.0 50cm
1700021883-01	A Cable 1*20P-1.0/2*20P-1.25 50cm
1700021941-01	A CABLE SATA 15P/1*4P-2.5 40cm for ROM-DB7500
1700022373-01	A cable 1*4P-1.25/1*5P-1.0 10cm ROM-3420
1701100300	F Cable IDE#3 10P-2.54/D-SUB 9P(M) 30cm
1700002204	A Cable 2*5P-2.54 /USB-A 4P(F)*2 27CM F/9
1960079757N000	Heat spreader freescale-iMX6 S-7W 70x63x8-SC RO

Option Accessories

Part No.	Description
170203183C	Power Code 3P EU 183cm
170203180A	Power Cord 3P UK 183cm
1700008921	Power Cord 3P PSE 183cm
EWM-W142F01E	802.11 b/g/n,AR9287,2T2R,Full size Mini PCIe
968EMW0093	Telit HE910-D Mini PCIE 3G
1750007156-01	Cellular/GPS SMA Short JACK(9.5MM) L=100mm (3G Cable)
1750007050-01	WiFi RP-SMA short SMA Jack(9.5mm) to U.FL_100mm (WiFi Cable)
1750000318	EMI Antenna 2DBI 2.4GHz SMA (WiFi Antenna)
1750005865	Antenna L=10.9cm 500hm AN8921F-5701SM (3G Antenna)