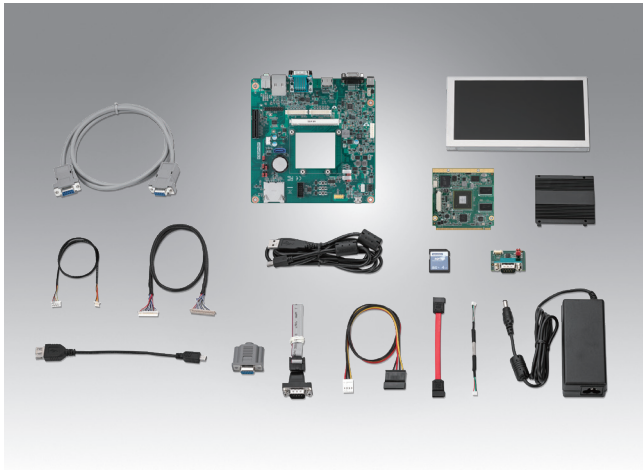


ROM-7421 Evaluation Kit

Development Kit for Qseven 2.0 CPU
Module ROM-7421



Features

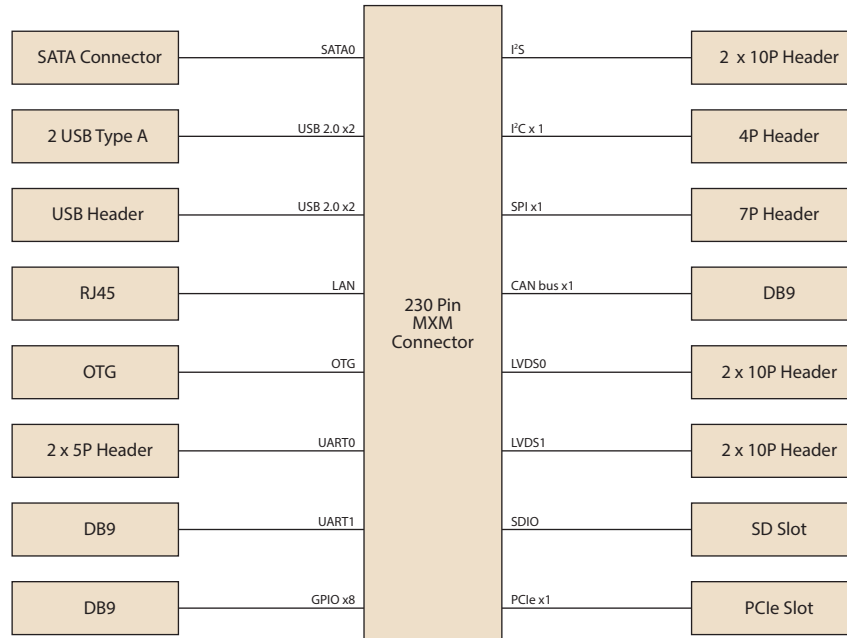
- Evaluation kit for ROM-7421
- Enhanced performance NXP i.MX6 Dual Plus 1GHz processor
- Onboard DDR3 1GB memory and eMMC 4GB
- HDMI, Dual channel 24bit LVDS, 1920 x 1080
- Supports 4 GB eMMC Flash, 1 SD/MMC, 1 SATA
- Supports 1 PCIe, 1 GbE, 4 USB 2.0, 1 USB OTG2.0, 1 SATAII, 1 I²C, 1 I²S, 1 Camera 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-F0A1E	ROM-7421 Evaluation Kit
ROM-DK7421-F0A2E	ROM-7421 Evaluation Kit w/o power code for china

Packing List

Part Number	Description
9680015491	miniPCIe to PCIe adapter card MP2W-S-SMA V2.2a
9696ED2000E	ASS'Y ROM-ED20 DB A101-1
9696O74200E	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
1700019146	Power Cord CCC 3P 2.5A 250V 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)