

DMS-BA16

Freescal e ARM Cortex-A9 i.MX6 Qseven V2.0 Module



Features

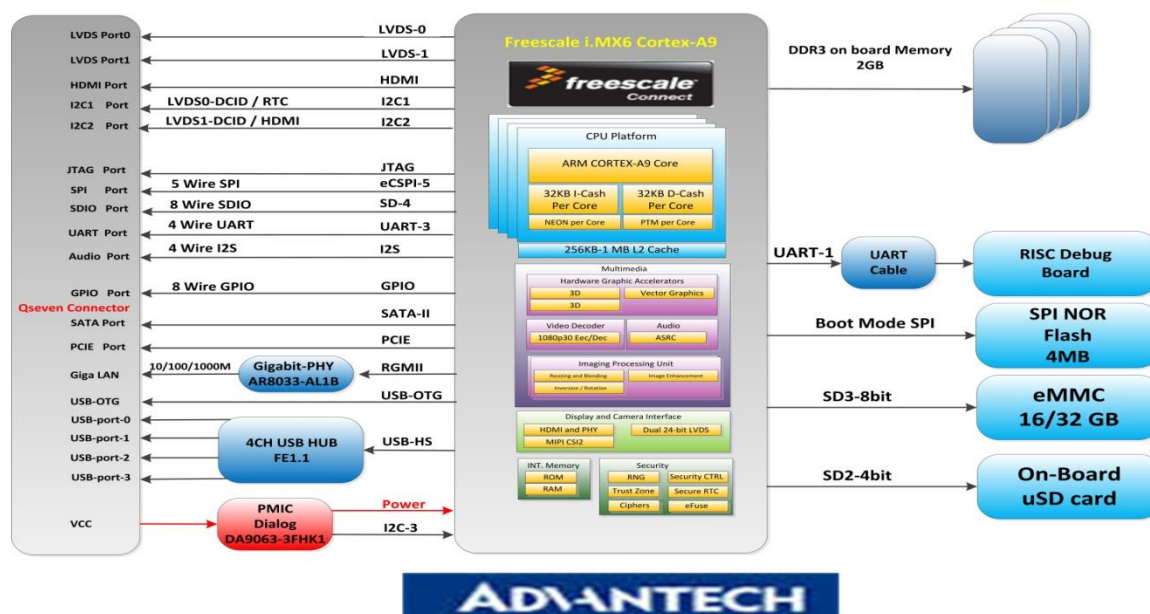
- Freescale ARM Cortex-A9 i.MX6 Dual Lite/Dual/Quad Core 1 GHz high performance processor
- 2GB Onboard DDR3L Memory; Up to 32GB Onboard eMMC NAND Flash
- Supports OpenGL ES 2.0 and OpenVG 1.1
- HDMI 1.4, 24-bit Dual LVDS
- 1x UART, 2x I²C, 8x GPIO, 4x Host USB 2.0 port, 1x USB OTG port, 1x micro SD (SDHC), 1x SDIO, 1x SATA II, 1x 10/100/1000 Mbps Ethernet, 1x PCIe x1 Gen1

Specifications

Computing System	CPU	Freescal e ARM Cortex-A9 i.MX6 Dual Lite/Dual/Quad Core 1.0 GHz
Memory	Technology	DDR3L 1066 MHz
	Capacity	On-board DDR3L 2GB
	Flash	8GB/16GB/32G eMMC NAND Flash for OS. and 4MB Serial NOR Flash for boot loader
	External Storage	Micro SD, up to 64GB
Graphics	LVDS	2 x 24-bit LVDS
	HDMI	1.4 port 1920 x 1080
	Graphic Engine	2 x IPUs (OpenGL ES 2.0 for 3D, BitBlit for 2D and OpenVG 1.1)
	H/W Video Code	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	Freescal e i.MX6 integrated RGMII
	Speed	1 x 10/100/1000 Mbps
RTC	RTC	Yes
WatchDog Timer		256-level timer interval, from 0.5 ~ 128 sec
Expansion Interface	PCIe	1 x PCIe x1 Gen1
	SATA	1 x SATA II
	USB	4 x USB 2.0, 1 x USB 2.0 OTG
	Audio	I ² S
	SDIO	1
	Serial Port	1 x UART
	SPI	1
	GPIO	8
	I ² C	2
Power	Power Supply Voltage	5V
	Power Consumption	Typical 3 ~ 5 Watt
Environment	Operating Temperature	0°C ~60°C
	Operating Humidity	10% ~ 90% @ 40°C, non-condensing
Physical Characteristics	Dimensions (W x D)	70 x 70 mm
Operating System		Linux Kernel Yocto

Block Diagram

Advantech iMX6 Qseven Block



Ordering Information

Part Number	CPU	Memory	Flash Memory	UART	LAN	USB Host	USB OTG	Display	SATA	PCle	HDMI	Micro SD	I ² C	SPI
DMS-BA16-00A1E	i.MX6 Dual 1GHz	2GB	16GB	1	1	4	1	2x24-bit LVDS	1	1	1	1	2	1
DMS-BA16-10A1E	i.MX6 Dual 1GHz	2GB	32GB	1	1	4	1	2x24-bit LVDS	1	1	1	1	2	1
DMS-BA16-20A1E	i.MX6 Quad 1GHz	2GB	32GB	1	1	4	1	2x24-bit LVDS	1	1	1	1	2	1
DMS-BA16-30A1E	i.MX6 Dual Lite 1GHz	1GB	8GB	1	1	4	1	2x24-bit LVDS	NA	1	1	1	2	1

Optional Accessory List

Part Number	Description
DMS-BA16-Y0A1E	Debug board with FFC cable
DMS-BA16-Z0A1E	Q7 development boards (incl. adapter W/O Q7)

For sales inquiries or further information, please contact us: Medical.dms@advantech.com.tw