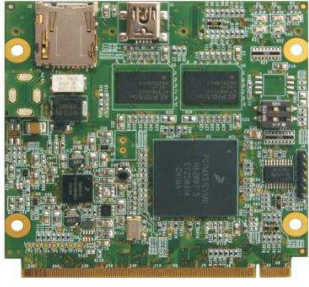





## i.MX51 / i.MX53 / i.MX6x CPU module

	Note *: Optional			
	i.MX51		i.MX53	i.MX6x
	Rainbow-G8M	Rainbow-G8M-Q7	Rainbow-G11M	Rainbow-G15M-Q7
<b>Benefits</b>	Q7 form factor (70mm x 70mm)	Q7 R1.20 compatible SOM module	industry standard (-40 to +85°C)	Q7 R1.20 compatible SOM module
	Fan less, low power solution	Fan less, low power solution	Fan less, low power solution	QUAD, DUAL, Solo core pin compatible
	on-board interfaces (uSD, USB)	on-board interfaces (uSD and JTAG)	on-board interfaces (uSD, USB)	on-board interfaces (uSD and JTAG)
	Long term support 5+ years	Long term support 5+ years	Long term support 5+ years	Long term support 5+ years
<b>OS Support</b>	Linux 2.6.35, Android 2.3, WinCE6.0	Linux 2.6.35, WinCE6.0	Linux 2.6.35, Android 2.3, WEC7, QNX *	OS Linux 3.0, Android 4.0, WEC7
<b>Applications</b>	Industrial HMI, Medical handhelds	Industrial HMI, Medical handhelds	Automotive infotainment, Digital signage, HMI	Automotive IVI, HMI, Handhelds, SOC computing
<b>CPU</b>	i.MX51 ARM Cortex A8 @800MHz	i.MX51 ARM Cortex A8 @800MHz	i.MX536 @800MHz Cortex A8	i.MX6x @1GHz Cortex A9 D/Q Core
<b>Hardware Accelerator</b>	OpenGL ES2.0 & H/W Accelerators	OpenGL ES2.0 & H/W Accelerators	OpenGL ES2.0 & H/W Accelerators	OpenGL ES2.0 & H/W Accelerators
<b>PMIC</b>	MC13892 + RTC	MC13892 + RTC	LTC3589	Internal PMIC
<b>OS</b>	Linux 2.6.35, Android BSP, WinCE	Linux 2.6.35, Android BSP, WinCE	Linux 2.6.35, Android BSP, WEC7*, QNX *	Linux 3.0.15, Android 4.0, WEC7
<b>Memory</b>	128MB DDR2 (Expandable to 512Mbyte)	128MB DDR2 (Expandable to 512Mbyte)	512 Mbyte DDR2 (Expandable to 1Gbyte)	1GB DDR3 SDRAM (Extendable to 4GB)
	128MB NAND (Expandable to 2GB), SPI Flash*	128MB NAND (Expandable to 2GB), SPI Flash*	SPI Flash*, 8GB eMMC Flash (Expandable)*	4 GB eMMC Flash (Expandable)*, SPI Flash*
	on board MicroSD slot	on board MicroSD slot	on board MicroSD slot	on board MicroSD slot
<b>On board support</b>	Boot mode SW, microSD, JTAG Header	Boot mode SW, microSD, JTAG Header	Boot mode SW, microSD, JTAG Header	Boot mode SW, microSD, JTAG Header
	<b>Edge connector Interface</b>	<b>Q7 edge connector</b>	<b>MXM-3 edge connector</b>	<b>Q7 edge connector</b>
	Ethernet 10/100 MII X 1	Ethernet 10/100 Mbps PHY output x 1	Ethernet 10/100 Mbps PHY output x 1	Gigabit Ethernet PHY output x 1
	SD/MMC port X 1	SATA 2.0 port x 1 *	UART X 3, I2C x 2, SDIO x 3, SPI x 2	HDMI 1.4, SATA 3.0 x 1
	I2C X 2, PWM X2	LVDS LCD port x1	24-Bit RGB , ESAI	PCIe v2.0 x 1
	USB 2.0 Host X 1 (without phy) , USB OTG X 1	AC97 audio, 8 bit SD/MMC	Audio , SATA, CAN1	Dual LVDS LCD port
	UART X 2, JTAG, GPIOs	CAN*, SPI , I2C	GPIO x 16, MLB, ESAI, SPDIF	USB 2.0 Host x 4, USB 2.0 device
	SPI, SSI (Audio) , CSI	USB 2.0 Host x 4, USB 2.0 device	Camera CSI port, CAN2*	AC97 audio, 8 bit SD/MMC
	Display (24 bit) [1080i / 720p], Analog TV-Out	<b>Expansion connector Interface</b>	Dual LVDS LCD support	CAN1, SPI, I2C
	<b>Expansion connector Interface</b>	Camera CSI x 2 (8bit)	USB 2.0 Host, USB 2.0 device	<b>Expansion connector Interface</b>
	Memory bus (16 bit multiplexed bus)	UART X 2, 4 x 4 keymatrix, Memory bus		camera CSI x 2 (8bit), MIPI CSI, MIPI DSI
	4 x 4 keymatrix, GPIOs	I2C, PWM, SSI, GPIOs, Analog TV-Out		24 bit RGB LCD IF, I2C, PWM, GPIO
	CSI-2, Display -2			UART X 2, 4 x 4 keymatrix, Memory bus
<b>Temperature</b>	0 to +60°C & Industrial*	0 to +60°C & Industrial*	0 to +70°C & Automotive -40 to +85°C*	commercial 0 to +70°C
<b>Form factor</b>	70x70mm	70x70mm (Q7 size)	85mm X 85mm (MXM-3 form factor)	70x70mm (Q7 size)
				

**Note:** The features mentioned with \* mark are optional items which will not be supported in the default configuration. For more information, please contact iWave systems.