




Overview 32bit CPU core modules

	HiCO.nect family		
			
Product	HiCO.ARM9	HiCO.SH7760	HiCO.SH7780
Windows CE	5.0	5.0, 6.0 R2	6.0 R2
Linux	2.6	2.6	2.6
QNX	-	6.3 SP2	6.4
CPU	Atmel	Renesas	Renesas
	AT91RM9200	SH7760 (SH4)	SH7780 (SH-4A)
	180 MHz	198 MHz	400 MHz
	-	360 MIPS	720 MIPS
Multimedia	-	-	-
Coprocessor	-	FPU	FPU
Flash	32 MB NOR Flash	32 MB NOR Flash	32 MB/opt. 64 MB NOR Flash
RAM	64 MB SDRAM	64 MB SDRAM	128 MB SDRAM
Ethernet	100Base TX	100Base TX	100Base TX
UART/RS232/LVTTL/IrDA	1 / 3 / 0	1 / 2 / 0	1 / 2 / 0
USB Host	2.0 full speed	1.1 full speed	1.1 full speed
USB Device	2.0 full speed	2.0 full speed	2.0 full speed
Digital Audio	-	-	-
Analog Audio	SSI Interface	SSI Interface	SSI Interface
Video In/Camera	-	-	-
Video out	-	-	-
CAN	-	2x 2.0A/B	2.0A/B
I2C	1	2	1
SPI	1	1	-
Port I/O	2	2 (+8)	5
MMC/SDC	MMC/SDC	MMC/SDC	MMC/SDC
CF interface	1	1	1
Touch interface	4-wire resistive	4-wire resistive	4-wire resistive
STN, CRT interface	-	STN	CRT
TFT	QVGA	up to VGA	up to XGA
PC/104 interface	yes	yes	yes
Size in mm	66 x 82 x 16	66 x 82 x 16	66 x 82 x 16
max. power consumpt.	3,3 V @ 300 mA	3.3V@680 mA	3.3 V@750mA
Operating temperature	0...70° C, opt. -40...+85° C	0...70° C, opt. -40...+85° C	0...70° C opt. -40...+85° C
Interface to carrier board	Processor bus and I/O via Hirose connector		
Carrier boards available	yes	yes	yes
Starterkits available	yes	yes	yes
Custom specific solutions	yes	yes	yes

Technische Änderungen vorbehalten.
Stand: 12/2011

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emtrion GmbH
Alter Schlachthof 45
D-76131 Karlsruhe
Tel. +49 (0) 721 62725-0
Fax +49 (0) 721 62725-19
E-Mail sales@emtrion.com

Visit us on the Internet:
www.emtrion.com

Overview 32bit CPU core modules

	DIMM family					
						
Product	DIMM-SH7722	DIMM-SH7723	DIMM-MX257	DIMM-SH7724	DIMM-MX53	
Windows CE	-	6.0	6.0	-	7.0	
Linux	2.6	2.6	2.6	2.6	2.6	
QNX	-	on request	on request	-	on request	
Android	-	-	-	-	2.3 (Gingerbread)	
CPU	Renesas SH7722 (SH4AL-DSP)	Renesas SH7723 (SH-4A)	Freescall i.MX25 (ARM9)	Renesas SH7724 (SH-4A)	Freescall i.MX53 (ARM Cortex-A8)	
	333 MHz	400 MHz	400 MHz	500 MHz	up to 1 GHz	
	600 MIPS	720 MIPS	440 MIPS	900 MIPS	up to 2000 MIPS	
Multimedia	MPEG-4 H.264 HW accelerator for video encode and decode	MPEG-4 H.264 HW accelerator for video encode and decode	-	MPEG-4 H.264 HW accelerator for video encode and decode	MPEG-4 H.264 HW accelerator for video encode and decode	
	JPEG processing unit	-	-	JPEG processing unit	-	
Coprocessor	DSP	FPU	-	FPU	FPU	
Flash	32 MB NOR Flash	8 MB NOR Flash / 256 MB NAND Flash	256 MB NAND Flash	1GB NAND Flash	up to 1GB NAND Flash	
RAM	64 MB SDRAM	128 MB DDR SDRAM	up to 128 MB DDR SDRAM	256MB DDR2 SDRAM	up to 1 GB	
Ethernet	100Base TX	100Base TX	100Base TX	100Base TX	100Base TX	
UART: RS232/LVTTL/IrDA	1 / 2 / 1	1 / 4 / 1	1 / 3 / 0	1 / 3 / 1	1 / 4 / 0	
USB Host	2.0 full speed	2.0 high speed	2.0 full speed	2.0 high speed	2.0 high speed	
USB Device	2.0 high speed	2.0 full speed	2.0 high speed	2.0 high speed	2.0 high speed	
Digital Audio	optional	SPDIF IN/OUT	-	-	-	
Analog Audio	SSI Interface	SSI Interface	SSI Interface	SSI Interface	SSI Interface	
Video In/Camera	YCrCb 4:2:2 interface for CMOS Camera up to 5MPixel or PAL/NTSC codec	YCrCb 4:2:2 interface for CMOS Camera up to 5MPixel or PAL/NTSC codec	8-bit interface for external PAL/NTSC codecs, e.g. for 1 CMOS camera up to 3 MPixel	YCrCb 4:2:2 interface for 2xCMOS Camera up to 5MPixel or PAL/NTSC codec	YCrCb 4:2:2 interface for 2xCMOS Camera up to 12MPixel or PAL/NTSC codec	
Video out	NTSC, YCrCb 4:2:2 interface	NTSC, YCrCb 4:2:2 interface	-	NTSC, YCrCb 4:2:2 interface	-	
CAN	-	-	2 x 2.0 A/B	2.0 A/B	up to 2 x 2.0 A/B	
I2C	1	1	1	1	1	
SPI	2	1	-	1	1	
Digital GPIO	10	10	3	10	8	
MMC/SDC	MMC/SDC (SDIO)	2*MMC/SDC (SDIO)	2*MMC/SDC (SDIO)	MMC/SDC (SDIO)	2*MMC/SD (SDIO)	
Touch interface	4-wire resistive	4-wire resistive	4-wire resistive	4-wire resistive	4-wire resistive	
RTC (battery buffered)	yes	yes	yes	yes	yes	
LCD interface	up to SVGA	up to SVGA	up to SVGA	up to SVGA	2 Interfaces, up to Full-HD	
Size in mm	67.6 x 45 x 9	67.6 x 45 x 9	67.6 x 45 x 9	67.6 x 50 x 9	67.6 x 50 x 10	
max. power consumption	3.3V@350mA	3.3V@400mA	3.3V@350mA	3.3V@400mA	3,3V@1A	
Operating temperature	0...70° C	0...70° C, opt. -40...85° C	0...70° C, opt. -40...85° C	0...70° C, opt. -20...85° C	0...70° C, opt. -40...85° C	
Interface to carrier board	Processor bus and I/O via SODIMM connector (200 pos., 2.5V keying)					
Carrier boards available	yes	yes	yes	yes	yes	
Starterkits available	yes	yes	yes	yes	yes	
Custom specific solutions	yes	yes	yes	yes	yes	

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