

		phyCORE-OMAP44xx	phyCORE-AM3517	phyCORE-i.MX35	phyCORE-i.MX31	phyCORE-i.MX27		phyCORE-LPC3250	phyCORE-MPC5121e	phyCORE-MPC5200B	phyCORE-MPC5554	phyCARD-XL	phyCARD-L	phyCARD-M	phyCARD-S	
CPU	Architecture	Cortex A9	Cortex A8	ARM1136JF-S	ARM1136JF-S	ARM926EJ		ARM926EJ	PowerPC	PowerPC	PowerPC	x86	Cortex A8	ARM1136JF-S	ARM926EJ	
	CPU	T.I. OMAP4430	T.I. AM3517	Freescale i.MX35	Freescale i.MX31	Freescale i.MX27		NXP LPC3250	Freescale MPC5121e	Freescale MPC5200B	Freescale MPC5554	Intel Atom Z510P/20P/30P	T.I. OMAP 3530/25	Freescale i.MX35	Freescale i.MX27	
	Frequency (max)	1 GHz	600 MHz	532 MHz	532 MHz	400 MHz		208 MHz	400 MHz	400 MHz	400 MHz	132 MHz	1.1/1.33/1.6 GHz	720 MHz	532 MHz	400 MHz
	Floating Point Unit	VFP	VFP	VFP	VFP	-		VFP	Double	Double	Double	Double	Double	VFP	VFP	-
Memory	On-Chip	56 KB SRAM	32 KB L1, 256 KB L2, 64 KB SRAM	16 KB L1,128 KB L2, 128 KB SRAM	16 KB L1,128 KB L2, 16 KB SRAM	16 KB L1, 45 KB SRAM		32 KB L1, 256 KB SRAM	128 KB SRAM	16 KB L1	2 MB Flash, 64 KB SRAM	56 KB L1, 512 KB L2	64 KB SRAM	16 KB L1, 128 KB L2, 128 KB SRAM	16 KB L1, 45 KB SRAM	
	SRAM	-	-	-	512 KB / 1/2 MB	256 /512 KB / 1/2 MB		-	1/2 MB	1/2 MB ⁵	2 /8/16 MB	-	-	-	-	
	DRAM	512 MB / 1 GB LPDDR2	256 /512 MB DDR2	128 /256/512 MB DDR2	128 /512 MB LPDDR	128 /256 MB DDR		16/32/ 64 /128 MB LPSDR	128/ 256 /512 MB DDR2	64 /128 MB DDR	-	512 MB / 1 GB DDR2	256 /512 MB / 1 GB LPDDR	128 /256 MB DDR2	32/64/ 128 /256 MB DDR	
	NAND	128/256/ 512 MB / 1 GB	128/ 256 /512 MB	1/2 GB	64 /128/256/512 MB / 1 GB	64 /128/256/512 MB / 1 GB		16/32/ 64 /128 MB	1 GB	-	-	1/2 GB	256 /512 MB / 1 GB	128 /256/512 MB / 1 GB	64/ 128 /256 MB	
	NOR	-	-	8 /16/32/64 MB	32 /64 MB	8 /16/32/64 MB		1/2/4/8 MB	16/ 32 MB	16 /32 ⁴ 32 /64 ⁵ MB	2 /8 MB	-	-	-	-	
	EEPROM	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB		32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB	4 /32 KB
Expansion	SD/SDIO/MMC	2	2	2	2	3		2	1	-	-	1	1	1	1	
	PCMCIA/CF	-	-	1	1	1		-	1	1	-	-	-	-	-	
	PCIe	-	-	-	-	-		-	-	-	-	-	-	-	-	
	SATA	-	-	-	-	-		-	1 (1.0a)	-	-	-	-	-	-	
Serial	UARTs	4	4 ¹	3	5	6		7	6 ³	2 (6) ⁶	2	1	1	1	1	
	RS-232	1	2	1	1	1		2	2	2	2	-	-	-	-	
	I ² C	3	3	3	3	2		2	3	2	1	1	1	1	1	
	I ² S	1	4 (McBSP)	2	2	2		2	6 ³	1	-	-	-	-	-	
	SPI/SSP	2	4 (McSPI) ¹	2	3	3		4	6 ³	1	4	-	1	1	1	
	CAN	-	1	2	1 ²	1 ²		-	4	2	3	-	-	-	-	
USB	Host	1 HS	1 HS	1 HS	1 HS, 1 FS	1 HS, 1 FS		-	-	2 ⁷	-	1 HS	1 HS	1 HS	1 HS	
	Device	-	-	-	-	-		-	-	-	-	-	-	-	-	
	OTG	1 HS	1 HS	1 HS	1 HS	1 HS		1 FS	2 HS	-	-	1 HS	1 HS	1 HS	1 HS	
Network	Ethernet (Mbit/s)	10/100	10/100	10/100	10/100	10/100		10/100	10/100	10/100	10/100	10/100	10/100	10/100	10/100	
Multimedia	Audio	Yes	Yes ²	Yes	Yes	Yes		Yes ²	Yes	Yes ²	-	Yes (HD Audio)	Yes (AC97 Interface)	Yes (AC97 Interface)	Yes (AC97 Interface)	
	Graphics	PowerVR SGX540	PowerVR SGX530	OpenVG 1.1	3D with VFP	-		-	MBX Lite 2D/3D	-	-	OpenGL 2.0, DirectX9	PowerVR SGX530	OpenVG 1.1	-	
	Video	IVA 3 (1080p encode/decode)	VPFE (REC656/CCIR-656, YCbCr 422)	-	MPEG-4 encoder	MPEG-4, H.263, H.264		-	XVGA Input	-	-	MPEG-4, MPEG-2, H.264, VC1, WMV9	-	-	MPEG-4, H.263, H.264	
Display	LCD	2 x DSI, 1 x HDMI	LVDS, TTL (24 bpp)	TTL (24 bpp)	TTL (18 bpp)	TTL (18 bpp)		TFT/STN (24 bpp)	LVDS, TTL (24 bpp)	-	-	LVDS (24 bpp)	LVDS (24 bpp)	LVDS (24 bpp)	LVDS (18 bpp)	
	Touch	Yes ²	Yes	Yes	Yes	Yes		Yes	-	-	-	Yes (SPI interface)	Yes (AC97 Interface)	Yes (AC97 Interface)	Yes (AC97 Interface)	
RTC		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	
A/D	Channel/Bit	-	-	-	-	7/10		3/10	-	-	40/12	-	-	-	-	
Miscellaneous		DVI/HDMI, PWM, Camera, Keypad, JTAG	PWM, TV Out, JTAG, GPIO, GPMC (16-bit data, 8 CS)	PWM, Camera, Keypad, JTAG	PWM, Camera, Keypad, JTAG	PWM, Camera, Keypad, JTAG		PWM, Keypad, JTAG	PCI 2.3, JTAG, GAL, PATA	FPGA ⁵ , PCI 2.2, DMA, JTAG	FPGA, DAC(12-bit), JTAG/Nexus	JTAG, GPIO (3)	JTAG, Camera (LVDS), GPIO (3)	JTAG, Camera	JTAG, Camera (LVDS), GPIO (3)	
Mechanical Specifications	Dimensions (mm)	41 x 51	58 x 72	58 x 85	58 x 84	60 x 84		58 x 70	60 x 76	53 x 57 ⁴ 57 x 84 ⁵	57 x 84	60 x 100	60 x 60	60 x 60	60 x 60	
	Connector	2 x 120 pin, 0.5 mm pitch	2 x 160 pin, 0.635 mm pitch	2 x 200-pin, 0.635mm pitch	2 x 200-pin, 0.635mm pitch	2 x 200-pin, 0.635mm pitch		2 x 160-pin, 0.635 mm pitch	2 x 160 pin, 0.635mm pitch	2 x 100-pin ⁴ 2 x 200-pin ⁵ , 0.635 mm pitch	2 x 200-pin, 0.635mm pitch	100-pin, 0.635 mm pitch	100-pin, 0.635 mm pitch	100-pin, 0.635 mm pitch	100-pin, 0.635 mm pitch	
Electrical Specifications	Supply	3.3 V	1.8/ 3.3 - 5.0 V	5.0 V	3.3 - 4.6 V	3.3 - 4.6 V		3.15 V	3.3 V	3.3 V	3.3 V & 5.0 V	5.0 V	3.3 V - 5.0 V	3.3 V - 5.0 V	3.3 V - 5.0 V	
	Power Consumption (typ.)	3 W max	1.25 W	3 W max	1.65 W	567 mW		372 mW	4 W max	4 W max	3.3 W	5 W	1.1 W	0.8 W	0.66 W	
	Temperature Range	-40° to +85°C	0° to 70°C/ -40° to +85°C	0° to 70°C / -40° to +85° C	0° to 70°C / -30° to +85° C	0° to 70°C / -20° to +85° C		-40° to +85° C	-40° to +85° C	-40° to +85° C	-40° to +85° C	-40° to +85° C	-40° to +85°C	-40° to +85°C	-30° to +85°C	-20° to +85°C
Operating Systems	Linux	Yes	Yes/Android	Yes	Yes	Yes		Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	
	Windows Embedded	Compact 7	CE 6.0, Compact 7	CE 6.0	CE 6.0	CE 6.0		CE 6.0, .Net MF	-	-	-	Standard (XP)	CE 6.0, Compact 7	CE 6.0	CE 6.0	

Notes: **Bold** indicates default; ¹ 1 muxed with I/O; ² Device located on Carrier Board; ³ Via Programmable Serial Controller; ⁴ phyCORE-MPC5200B-tiny version; ⁵ phyCORE-MPC5200B-I/O version; ⁶ Requires special modification; ⁷ No PHY on SOM