

Samsung System LSI's Focusing Guide V 2.0

July 2001



>> MCU Line-up

Bit	Application or Competition	Device	OTP Flash	RAM	Timers	LCD Driver	A/D (ch*bit)	Serial Interface	Packages	Additional Features	Target Board
4bit	Card Reader	S3P72N4	4K O	288N	WT/8TC	32*4	X	X	64QFP		TB72N4
	High-end LCD	S3P72P9	32K O	1056N	WT/8TC/16TC	56*16	X	SIO	100QFP	Buzzer output	TB72P9
	High-end LCD	S3P72M9	16K O	3.84KN	WT/8TC/16TC	80*16	3*Com	SIO	128QFP	Buzzer output	TB72M9
8bit	Microchip	S3F9444	4K F	208B	8TC	X	3*10	X	8DIP/SOP	RC,POR	TB9444
	Atmel	S3F9454	4K F	208B	8TC	X	8*10	X	20DIP/SOP	RC,POR,PWM	TB9454
	Industrial	S3P9428	8K O	208B	2*8TC	X	12*10	IIC,SIO	30SDIP/32SOP	POR,PWM,ZCD	TB9428
	Home appliance	S3F8235	16K F	552B	WT/2*8TC/16TC	24*8	8*10	X	64QFP	Vtg. Booster,LVR	TB8235
		S3P8245	16K O	544B	Wt/2*8/2*16TC	32*4	8*10	SIO	80QFP/TQFP	RC,LVD	TB8245
	USB	S3P9648	8K O	208B	8TC	X	X	X	42SDIP/44QFP	Low speed USB	TB9648
	Industrial	S3P8475	16K O	272B	WDT/8T/16T	X	8*10	UART	42SDIP/44QFP	S/W PWM,Buzzer	TB8475

Note 1) Target board for 4/8bit : TBxxxx (TB72N4). All 4/8bit have basic timer (BT) used for Watch-dog function .

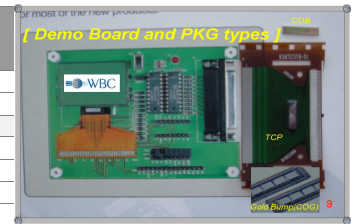
Procedure of MASK ROM Order: 1) fill in MASK ROM contract + Mask Order form 2) Send them with ROM file in binary format (HEX2ROM.exe)

Bit	Application	Device ARM Core	Max. Mhz	Cache (I/D RAM)	Timers	Memory Interface (SDRAM)	A/D (ch*bit)	Serial Interface	Packages	Additional Features	Evaluation Board
16bit	General	S3C3410X	40	4K	WDT/2*8TC 3*16TC	8bank(2)	8*10	Uart,IIC 2*SIO	128QFP	RTC,2*DMA	SMDK40100
32bit	PDA,Feature phone,etc	S3C44B0A	66	8K	Wdt/5*16TC /16IT	8bank(2)	8*10	2*Uart,IIC IIS,SIO	160LQFP/ 160FBGA	RTC,2*Dma,16gray /256 Color LCD	SMDK41100
	General	S3F441FX	40	8K	WDT/6*16TC	3bank	X	UART	64LQFP	256KB Flash built-in	SMDK40125
	PDA Feature phone	S3C2400* ARM920T W/ MMU	150	I-16K D-16K	WDT/ 4*16TC 16IT	8banks (2)	8*10	IIC/IIS,SPI 2*Uart 4*DMA	208LQFP 208FBGA	2ch USB v1.1 Host RTC,STN/TFT LCDController,etc	Under preparation
	Ethernet Netsilicon	S3C4510B	50	8K	2*32TC	14banks (4/4 Ext.)	X	IIC,2*Hdlc 2*Uart	208QFP	Ethernet MAC	KEB-50100
		S3C4530A	50	8K	2*32TC	14banks (4/4 Ext.)	X	IIC,2*Hdlc 2*Uart	208QFP	Ethernet MAC, S3C4510 upgrade	KEB-50300
	ISDN TA	S3C4520X*	50	4K	WDT/2*32TC	8banks (2/2 Ext.)	X	IOM-2,Uart 3*Hdlc	144LQFP	USB V1.1,6*DMA	N/A
	Compact Flash	S3C49F9X*									N/A

Note 2) S3C/F4xxx have ARM7TDMI.Core , S3C2xxx have ARM9 Core , * : Under development

>> LDI Line-up

LCD Type	Device	Vdd (Vlcd Max.)	Seg	Com	Char * Lines	Inter- face (bits)	Packages	DC/DC Converter (times)	Built-in Power
STN Character	S6A0032	2.4~5.5(6V)	80	16	16 * 2	4/8	COG	N/A	N/A
	S6A0093	2.4~5.5(6V)	80	26	16 * 2/3	1/4/8	COG, TCP	4	Yes
	S6B0718	2.4~3.6(15V)	104	81	-	1/8	COG , TCP	3~6	Yes
STN Graphic	S6B0755	1.8~3.3(15V)	128	65	-	1/8	COG , TCP	3~5	Yes
	S6B0723	2.4~3.6(15V)	132	65	-	1/8	TCP	2~5	Yes
	S6B0724	2.4~3.6(15V)	132	65	-	1/8	COG	2~5	Yes
	S6B0741	1.8~3.3(15V)	128	129	-	1/8	COG, TCP	3~6	Yes



Note3) All Character type here have CGROM/CGRAM and all Graphic types have DDRAM (Display Data RAM).

Major Market will be Telephony (ISDN, VoIP, Feature phone etc), payment terminal, home appliance etc.

>> IIC EEPROM Line-up

Device	Density	Voltage (R/W)	Packages	Current @5.5V Nomal/Stand-by	Nomal/Fast (Khz)	Additional Features
S524C20D21	2K	2.2/2.5 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524C80D41	4K	2.2/2.5 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524C80D81	8K	2.2/2.5 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524L50X51	16K	2.0 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524LB0X91	32K	2.0 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524LB0XB1	64K	2.0 ~ 5.5	8SOP/DIP/T&R	3 mA / 5uA	100/400	H/W W/P
S524AD0XF1	256K	1.8 ~ 5.5	8TSSOP/T&R	3 mA / 1uA	400/1Mhz	H/W W/P

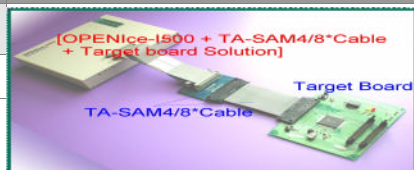
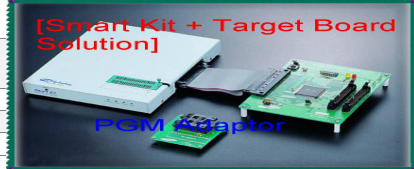
Note 4) Samsung EEPROM has the same pin-out as Atmel's with H/W Write Protection.

S524A version is scheduled

To be available from October 2001 supporting 1.8V to 5.5V.

For more details, contact our local WBC office

>> Development Tools

Company	CPU	Part number	Description	C-comp-iler	S/W	Ref. (USD)	How to configure tools
	4/8bit	OpenICE-I500	High-end Emulator	IAR	Openice	1200	
	4/8bit	Probe (P-xxxx)	* Probe can replace Target board, but Openice-i500 only support it. TA-SAM4/8+Cable is required When i500 need to connect to Target board.			On request	
	4bit	TA-SAM4+Cable				150	
	8bit	TA-SAM8+Cable					
 < Autotek >	4bit	SK-420	Emulator	No	Winshine	750	
	8bit	SK-820	Emulator	No	Winshine	750	
	PGM Writer	SPW-2	Single programmer			400	
		GW-PRO2	Gang Writer(8 sockets supported)			900	
		SA-each Pkg type	Single pgm adapter			N/A	
		GA-each Pkg type	Gang pgm adapter (8sets)			N/A	
Aiji / C&A	CalmRISC 8bit	IM-300 or IMC-53	Invisible Emulator Including C-compiler		CalmSHINE	300	Invisible Emulator + Target board, C Language chain included
	4/8bit	Programming service	4/8bit OTP/Flash programming support		Oliver.Roeck@semitron.de	N/A	Contact Semitron for pricing!

e-Mail Hotline: Openice@aijisystem.com and Autotek@unitel.co.kr (C&A technical support Partner)

Development Tools	Company	S/W and H/W	Description	Contact point	Ref. (USD)	Remarks	
ARM Related Tools 		ARM SDT 2.5.1	S/W tool chains with debugger	UL@ak-elektronik.de	4,250		
		ARM ADS 1.1			6,500		
		MultiICE	H/W Emulator		3,500		
		JEENI	H/W Emulator(ARM7/9) with 10-baseT Ethernet	as WBC Partner	2,750		
		MAJIC	H/W Emulator(ARM7/9/10) with 100-baseT Ethernet		3,350		
		OpenICE32 A-700	H/W Emulator for ARM7TDMI only	WBC	1,900	Only ARM SDT2.5.1(ADW) and ARM7TDMI	
		VxWORKS AE	RTOS	www.windriver.com	N/A		
		Tornado tool 3	S/W tool chains w/ debug.		3,700		
		VisionICE II	ICE based on Ethernet				
		Diab Compiler suites	C/C++ compiler/ass./linker				
		RTA	GUI + Run time analysis				5,400
		VisionPROBE II + VisionCLICK	H/W Emulator Source-level S/W Debugger	WBC			
VLTK-4510B		Linux Training Kits for S3C4510 & S3C4530	1,300				
VLTK-4530A			11,000				
VL4510B-B		S3C4510 S/W + H/W	11,000				
VL4530A-B		S3C4530 S/W + H/W	8,000				
VL3410X-B		S3C3410 S/W + H/W	11,000				
VL44b0A-B		S3C44B0X S/W + H/W	16,000				
VL8946-B		S5N8946 S/W + H/W					
Samsung Evaluation board	Samsung 3 rd parties	Refer to line-up table	Board + C-level Evaluation code	WBC	N/A	meritech@unitel.co.kr (General products) yskim@topmicrosystems.com (Network products)	

Note 5) Visionclick support most of compilers including GNU. For more detail, Please contact Windriver.

" All information can change without notice, especially ref. price "

N/A : please contact supplier or WBC, depending on items.

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