

SAMSUNG ELECTRONICS

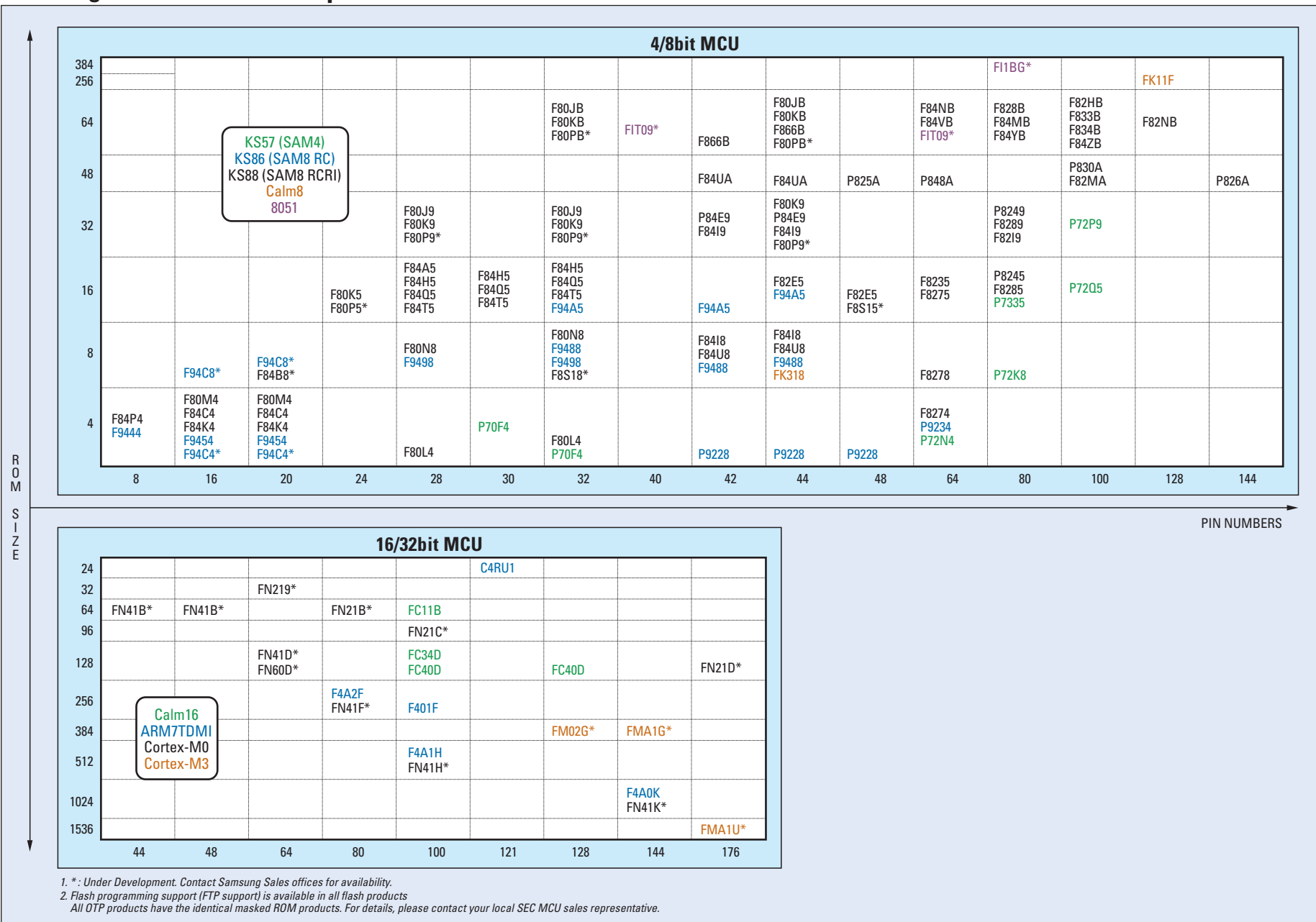
MCU/EEPROM

Selection Guide

- Samsung MCU Product Line-up
- 4-bit Microcontroller
- 8-bit Microcontroller
- 16-bit Microcontroller
- 32-bit Microcontroller
- Serial EEPROM
- EOL List
- MCU Product Numbering Guide
- Samsung MCU Tool Guide

SAMSUNG

Samsung MCU Product Line-up



4-bit Microcontroller

Samsung 4-bit Microcontroller Family															
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	SIO	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	DTMF	Max.Osc. Freq.	V _{DD} (V)	OP Temp (°C)	Other Features
S3P7xxx (KS57) Series															
S3P70F4XZ0-AV94 S3P70F4XZ0-S094	30SDIP 32SOP	4	512	24	3/2	BT/WT/8TC	Yes	-	Comx4	-	-	6MHz	1.8 ~ 5.5	-25 ~ 85	GP with Comparator
S3P72K8XZ0-QW88	80QFP	8	1024	27	3/4	BT/WT/8TC	Yes	40/8	Comx2	-	-	6MHz	2.0 ~ 5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output
S3P72N4XZ0-QT84	64QFP	4	288	24	2/2	BT/WT/8TC	-	32/4	-	-	-	6MHz	1.8 ~ 5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output
S3P72P9XZ0-QX89	100QFP	32	1056	39	4/4	BT/WT/8TC/16TC	Yes	56/16	-	-	-	6MHz	1.8 ~ 5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output.
S3P72Q5XZ0-QX85	100QFP	16	5264	39	3/3	BT/WT/8TCx2	-	60/12	-	-	-	6MHz	1.8 ~ 5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output
S3P7335XZ0-QW85	80QFP	16	512	56	4/4	BT/WT/ WDT/8T	Yes	28/4	8x4	-	-	6MHz	1.8 ~ 5.5	-25 ~ 85	PLL Frequency synthesizer, IF counter

1. (1) : S/W supported PWM

2. Abbreviation

SIO = Serial Input/Output

ADC = Analog to Digital converter

Com = Voltage Comparator

PWM = Pulse Width Modulation

DTMF = Dual Tone Multi Frequency

Timer/Counters : BT / WT / WDT = Basic / Watch / Watchdog timer, 8T / 16T = 8-bit / 16-bit Timer/Counter

8-bit Microcontroller

Samsung 8-bit Microcontroller Family															
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3F9xxx (KS86) Series															
S3P9228AZ0-AQ98 S3P9228AZ0-QZ88 S3P9228AZ0-LR88	42SDIP 44QFP 48ELP	8	256	36	4/10	BT/WT/8TCx2	SIO	16/8	10x4	-	8MHz	500	2.0~5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output
S3P9234XZ0-QT84	64QFP	4	208	52	5/7	BT/WT/8TCx2	SIO	32/4	-	-	8MHz	500	2.0~5.5	-25 ~ 85	RC osc., Subsystem clock, Buzzer output
S3F9444XZ0-SC94 S3F9444XZ0-DC94	8SOP 8DIP	4	208	6	1/2	BT/8TC	-	-	10x3	-	10MHz	400	2.0~5.5	-25~ 85	LVR,Internal RC(3.2Mhz/0.5Mhz),External RC
S3F9454BZ0-SH94 S3F9454BZ0-RH94 S3F9454BZ0-DK94 S3F9454BZ0-SK94 S3F9454BZ0-VK94	16SOP 16TSSOP 20DIP 20SOP 20SSOP	4	208	14 14 18 18 18	2/2	BT/8TC	-	-	10x9	8x1	10MHz	400	2.0~5.5	-25~ 85	LVR,Internal RC(3.2Mhz/0.5Mhz),External RC
S3F94C4XZZ-SH94* S3F94C4XZZ-RH94* S3F94C4XZZ-DK94* S3F94C4XZZ-SK94* S3F94C4XZZ-VK94*	16SOP 16TSSOP 20DIP 20SOP 20SSOP	4	208	14 14 18 18 18	2/2	BT/8TC	-	-	10x9	8x1 (12/14x1)	10MHz	400	1.8~5.5	-40 ~ 85	LVR,Internal RC osc(3.2/0.5MHz±1%), External RC osc
S3F94C8XZZ-SH98* S3F94C8XZZ-RH98* S3F94C8XZZ-DK98* S3F94C8XZZ-SK98* S3F94C8XZZ-VK98*	16SOP 16TSSOP 20DIP 20SOP 20SSOP	8	208	14 14 18 18 18	2/2	BT/8TC	-	-	10x9	8x1 (12/14x1)	10MHz	400	1.8~5.5	-40 ~ 85	LVR,Internal RC osc(3.2/0.5MHz±1%), External RC osc

8-bit Microcontroller

Samsung 8-bit Microcontroller Family															
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3F9xxx (KS86) Series															
S3F9488XZ0-A098 S3F9488XZ0-S098 S3F9488XZ0-AQ98 S3F9488XZ0-QZ88	32SDIP 32SOP 42SDIP 44QFP	8	208	26 26 36 38	6/4	BT/8TC	UART	19/8	10x9	-	10MHz	400	2.2~5.5	-25~85	
S3F9498XZ0-SN98 S3F9498XZ0-S098 S3F9498XZ0-A098	28SOP 32SOP 32SDIP	8	208	22 24 26	11/5	BT/8TCx4/16TC	SIO,UART	-	10x8	12x1(8x1)	8MHz	500	2.0~5.5	-25~85	LVR
S3F94A5XZ0-QZ85 S3F94A5XZ0-AQ95 S3F94A5XZ0-A095	44QFP 42SDIP 32SDIP	16	368	34	8/15	BT/WT/8TCx1/16TCx2	SIO	-	10x16	8x1,16x2	12MHz	333	2.0~5.5	-25~85	Internal 8MHz RC Oscillator
S3F8xxx (KS88) Series															
S3F80J9XZZ-S099 S3F80J9XZZ-SN99	32SOP 28SOP	32	656	26 22	6/16	BT/8Tx1/16Tx1	-	-	-	8x1	8MHz	500	1.95~3.6	-25~85	Carrier Frequency Generator, LVR(2.15V)LVD flag(2.3V), Executable 384byte RAM of Total RAM
S3F80JBBZZ-QZ8B S3F80JBBZZ-S09B	44QFP 32SOP	64	656	38 26	8/16	BT/8Tx1/16Tx2	-	-	Comx4	8x1	8MHz	500	1.95~3.6	-25~85	Carrier Frequency Generator, LVR(2.15V)LVD flag(2.3V), Executable 384byte RAM of Total RAM
S3F80K5XZZ-SM95 S3F80K5XZZ-AM95	24SOP 24SDIP	16	528	19 19	6/9	BT/8Tx1/16Tx1	-	-	-	8x1	8MHz	500	1.65~3.6	-25~85	Carrier Frequency Generator, LVR(1.75V)LVD flag1,2,3,4, Executable 256byte RAM of Total RAM
S3F80K9XZZ-QZ89 S3F80K9XZZ-S099 S3F80K9XZZ-SN99	44QFP 32SOP 28SOP	32	1272	26 26 22	6/16	BT/8Tx1/16Tx1	-	-	-	8x1	8MHz	500	1.65~3.6	-25~85	Carrier Frequency Generator, LVR(1.75V)LVD flag1,2,3,4, Executable 1Kbyte RAM of Total RAM
S3F80KBXZZ-QZ8B S3F80KBXZZ-S09B	44QFP 32SOP	60	2272	38 26	8/16	BT/8Tx1/16Tx2	-	-	-	8x1	8MHz	500	1.65~3.6	-25~85	Carrier Frequency Generator, LVR(1.75V) LVD flag1,2,3,4, Executable 2Kbyte RAM of Total RAM
S3F80P5XZZ-SM95 S3F80P5XZZ-AM95	24SOP 24SDIP	18	2272	19 19	7/9	BT/8TCx1/16TCx2	-	-	-	8x1	8MHz	500	1.6~3.6	-25 ~ 85	Carrier Frequency Generator, LVR(1.65V) LVD flag1,2,3,4, Executable 1Kbyte RAM of Total RAM
S3F80P9XZZ-QZ89 S3F80P9XZZ-S099 S3F80P9XZZ-SN99	44QFP 32SOP 28SOP	32	2272	26 26 22	7/16	BT/8TCx1/16TCx2	-	-	-	8x1	8MHz	500	1.6~3.6	-25 ~ 85	Carrier Frequency Generator, LVR(1.65V) LVD flag1,2,3,4, Executable 1Kbyte RAM of Total RAM
S3F80PBXZZ-QZ8B S3F80PBXZZ-S09B	44QFP 32SOP	64	2272	38 26	7/16	BT/WT/8TCx2/16TCx2	-	-	-	8x1	8MHz	500	1.6~3.6	0 ~ 70	Carrier Frequency Generator, LVR(1.65V) LVD flag1,2,3,4, Executable 2Kbyte RAM of Total RAM
S3F80L4XZZ-A094 S3F80L4XZZ-S094 S3F80L4XZZ-SN94	32SDIP 32SOP 28SOP	4	144	26 26 22	2/8	BT/8TCx1	-	-	-	-	6MHz	667	2.2~5.5	-25~85	External RC Oscillator (4~6 MHz)
S3F80M4XZZ-DK94 S3F80M4XZZ-SK94 S3F80M4XZZ-DH94 S3F80M4XZZ-SH94	20DIP 20SOP 16SOP	4	128	15	2/4	BT/8TCx1	-	-	-	8x1	10MHz	400	2.0~5.5	-25~85	-

8-bit Microcontroller

Samsung 8-bit Microcontroller Family															
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3F8xxx (KS88) Series															
S3F80N8XZZ-SN98 S3F80N8XZZ-S098 S3F80N8XZZ-A098	28SOP 32SOP 32SDIP	8	144	22 26 26	2/8	BT/8TCx1	-	-	-	-	10MHz	400	2.0~5.5V	-40~85	LVR.External RC Oscillator, High sink current
S3F8235BZ0-QT85 S3F8235BZ0-ET85	64QFP 64LQFP	16	552	32	8/8	BT/8TCx2/16TC	-	24/8	10x8	8x2	8MHz	500	2.0 ~ 5.5	-25 ~ 85	LVD, Voltage Booster & Regulator
S3P8245AZ0-TW85 S3P8245AZ0-QW85	80TQFP 80QFP	16	544	45	8/8	BT/WDT/8Tx2/16Tx2	SIO	32/4	10x8	(8x2,16x1)	10MHz	400	1.8 ~ 5.5	-25 ~ 85	LVD, Voltage Booster & Regulator, RC osc.
S3P8249XZ0-TW89 S3P8249XZ0-QW89	80TQFP 80 QFP	32	1056	45	8/8	BT/WDT/8Tx2/16Tx2	SIO	32/4	10x8	(8x2,16x1)	10MHz	400	1.8 ~ 5.5	-25 ~ 85	LVD, Voltage Booster & Regulator, RC osc.
S3P825ACZ0-TW8A S3P825ACZ0-QW8A	80TQFP 80QFP	48	2096	67	11/12	BT/WT/8TC/16TC	SIO, UART	28/8	10x4	(8x1, 16x1)	8MHz	500	2.0~5.5	-25 ~ 85	General purpose
S3P826AXZ0-QC8A	144QFP	48	2K	128	9/12	BT/8TCx3/16TCx1	SIO	80/16	8x4	8x2	8MHz	500	2.0 ~ 5.5	-25 ~ 85	Buzzer Output
S3F8274XZZ-QT84 S3F8274XZZ-ET84	64QFP 64LQFP	4	256	52	4/8	WT/BT/8TCx2	SIO	32/4	-	-	8MHz	500	2.0~3.6	-25~85	LVR, Battery Level Detector
S3F8278XZZ-QT88 S3F8278XZZ-ET88	64QFP 64LQFP	8	256												
S3F8275XZZ-QT85 S3F8275XZZ-ET85	64QFP 64LQFP	16	512												
S3F8285XZZ-QW85 S3F8285XZZ-TW85	80QFP 80TQFP	16	512	65	10/8	BT/WT/8TCx2/16TCx2	UART,SIO	32/8	10x8	8x1,16x1	11.1MHz	364	2.0~3.6	-25~85	LVR, Battery Level Detector
S3F8289XZZ-QW89 S3F8289XZZ-TW89	80QFP 80TQFP	32	1024												
S3F828BXZZ-QW8B S3F828BXZZ-TW8B	80QFP 80TQFP	64	2560												
S3F82E5XZZ-QZ85 S3F82E5XZZ-TB85	44QFP 48TQFP	16	208	38	5/4	BT/WT/8TCx1	SIO	23/4	-	-	8MHz	500	2.0~3.6	-25 ~ 85	Carrier Frequency Generator
S3F82HBXZZ-QX8B S3F82HBXZZ-TX8B	100QFP 100TQFP	64	2.5K	83	17/12	BT/WT/8TCx2/16TCx2	UARTx2, SIO	52/8	10x8	8x1,16x2	12MHz	333	2.0 ~ 3.6	-25 ~ 85	LVR, BLD, 16-Bit Frequency Counter, Voltage Booster & Regulator Two Analog Comparators
S3F82I9XZZ-QW89 S3F82I9XZZ-TW89	80QFP 80TQFP	32	1024	63	10/8	BT/WDT/WT/ 8TCx2/16TCx2	UART, SIO	32/8	10x8	8x1,16x2	12MHz	333	2.0 ~ 3.6	-25 ~ 85	LVR, BLD, Voltage Booster&Regulator
S3F82MAXZZ-QX8A S3F82MAXZZ-TX8A	100QFP 100TQFP	48	3088	44 44	7/15	BT/WT/8TC/16TC	SIO	56/16	10x5	8x1, 16x1	12MHz	333	1.8~5.5	-40 ~ 85	LVR,External RC osc,7x16 Key Matrix
S3F82NBXZZ-QA8B	128QFP	64	4122	83	7/12	BT/WT/8TC/16TC	SIO	80/16	10x8	8x1, 16x1	12MHz	333	1.8~5.5	-40 ~ 85	LVR,External RC osc,3-Int/2-Ext Comparators
S3P830AXZ0-QX8A	100QFP	48	2084	72	10/8	BT/WDT/8Tx2/16T	SIOx2	40/4	8x4	8x1	4.5MHz	889	3.0 ~5.5	-25 ~ 85	PLL frequency synthesizer , RDS
S3F833BXZZ-QX8B	100QFP	64	2560	86	13/8	BT/WDT/WT/8Tx2/16T	SIOx2,UARTx2	40/8	10x12	8x1	12MHz	333	2.0 ~ 3.6	-40 ~ 85	PLL frequency synthesizer , RDS
S3F834BXZZ-TX8B	100TQFP	64	2560	86	13/8	BT/WDT/WT/8Tx2/16T	SIOx2,UARTx2	40/8	10x12	8x1	12MHz	333	2.0 ~ 3.6	-40 ~ 85	PLL frequency synthesizer , RDS
S3P848AXZ0-AT9A S3P848AXZ0-QT8A	64SDIP 64QFP	48	2064	56	15/14	BT/8Tx4/16Tx2	UARTx2,SIO	-	10x8	14x2,(8x2)	12MHz	333	2.7~5.5	-25 ~ 85	LVR,PGM
S3F84A5XZZ-SN95 S3F84A5XZZ-VN95	28SOP 28SSOP 32ELP	16	400	24 24 24	12/5	BT/8TCx2/16TC	UART	-	10x8	8x6	10MHz	400	2.0~5.5	-40~85	LVR

8-bit Microcontroller

Samsung 8-bit Microcontroller Family															
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3F8xxx (KS88) Series															
S3F84B8XZZ-DK98* S3F84B8XZZ-SK98*	20DIP 20SOP	8	272	17 17	11/6	BT/8TC/16TC	-	-	10x8	10x1	10MHz	400	1.8~5.5	-40 ~ 85	Comparatorx4,OP-amp,LVR, Internal RC osc(8.0/0.5MHz±1%),External RC osc
S3P84E9XZ0-AQ99 S3P84E9XZ0-QZ89	42SDIP 44QFP	32	272	36 34	9/12	BT/8TC/8T16TCx2/WT	UART	-	10x8	(8X1)	12MHz	333	2.7~5.5	-25 - 85	LVR, Buzzer Output
S3F84H5XZZ-A095 S3F84H5XZZ-S095 S3F84H5XZZ-L085 S3F84H5XZZ-AV95 S3F84H5XZZ-SN95	32SDIP 32SOP 32ELP 30SDIP 28SOP	16	272	22 22 22 20 18	12/4	BT/WT/8TCx2/16TCx2	UART,SIO	-	10x8	10x1	10MHz	400	2.5~5.5	-25~85	LVR
S3F84I8XZZ-AQ98 S3F84I8XZZ-QZ88	42SDIP 44QFP	8	292	32 34	12/4	BT/WT/8TCx2/16TCx2	UART,SIO	16/8	10x8	10x1	10MHz	400	2.5~5.5	-25~85	LVR
S3F84I9XZZ-AQ99 S3F84I9XZZ-QZ89	42SDIP 44QFP	32	528	32 34											LVR
S3F84K4XZZ-SH94 S3F84K4XZZ-RH94 S3F84K4XZZ-DK94 S3F84K4XZZ-SK94 S3F84K4XZZ-VK94	16SOP 16SSOP 20DIP 20SOP 20SSOP	4	208	13 13 17 17 17	3/2	BT/16(8x2)TC	-	-	10x9	12x1	8MHz	500	2.0 ~ 5.5	-25~ 85	Internal 1M/8MHz RC Oscillator, LVR
S3F84MBXZZ-TW8B S3F84MBXZZ-QW8B	80TQFP 80QFP	64	2064	70	17/10	BT/8TCx2/16TCx2/8Tx2	UARTx3, SIOx2	-	10x15	8x2	10MHz	400	2.4~5.5	-40~85	Pattern generation module , Async UART 4.5~5.5V @ 16MHz
S3F84NBXZZ-QT8B S3F84NBXZZ-AT9B	64QFP 64SDIP	64	2064	56	15/14	BT/WT/8TCx4/16TCx2	UARTx2, SIO	-	10x8	-	10MHz	400	2.0~5.5	-40~85	LVR, Pattern Generation Module, Carrier frequency generator
S3F84P4XZZ-SC94 S3F84P4XZZ-DC94	8SOP 8DIP	4	208	6	3/2	BT/16(8x2)TC	-	-	10x4	12x1	10MHz	400	2.0 ~ 5.5	-25~85	Internal 1M/8MHz RC Oscillator, LVR
S3F84Q5XZZ-SN95 S3F84Q5XZZ-AV95 S3F84Q5XZZ-A095 S3F84Q5XZZ-S095 S3F84Q5XZZ-L085	28SOP 30SDIP 32SDIP 32SOP 32ELP	16	528	22 24 26 26 26	14/9	BT/WT/8TCx2/ 16TC/16(8x2)TC	UART,SIO	-	10x8	14x1	10MHz	400	2.0 ~ 5.5	-40~85	LVR
S3F84T5XZZ-SN95 S3F84T5XZZ-AV95 S3F84T5XZZ-A095 S3F84T5XZZ-S095	28SOP 30SDIP 32SDIP 32SOP	16	272	20 22 24 24	12/4	BT/WT/8TCx2/ 16TCx2	UART,SIO	-	10x8	10x1	10MHz	400	2.0~5.5	-40~85	IVC, LVR
S3F84U8XZZ-QZ8A S3F84U8XZZ-AQ9A	44QFP 42SDIP	8	294	36 34	14/10	BT/WDT/WT/ 8TCx3/16TCx2	UARTx2, SIO	16/8	10x8	8x3 16x2	12MHz	333	2.0~5.5	-40~85	LVR, IVC, PGM
S3F84UAXZZ-QZ8A S3F84UAXZZ-AQ9A	44QFP 42SDIP	48	550	36 34	14/10	BT/WDT/WT/ 8TCx3/16TCx2	UARTx2, SIO	16/8	10x8	8x3 16x2	12MHz	333	2.0~5.5	-40~85	LVR, IVC, PGM

8-bit Microcontroller

Samsung 8-bit Microcontroller Family																
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features	
S3F8xxx (KS88) Series																
S3F84VBXZZ-QT8B S3F84VBXZZ-AT9B	64QFP 64SDIP	64	2098	54	14/16	BT/WDT/WT/8TCx3/16TCx2	UARTx2, SIO	28/8	10x8	8x3 16x2	12MHz	333	2.0~5.5	-40~85	LVR, IVC, Voltage Booster&Regulator, PGM	
S3F84YBXZZ-QW8B S3F84YBXZZ-TW8B	80QFP 80TQFP	64	2114	70	15/16	BT/WDT/WT/8TCx4/16TCx2	UARTx2, SIO	44/8	10x8	8x4 16x2	12MHz	333	2.0~5.5	-40~85	LVR, IVC, Voltage Booster&Regulator, PGM, DAC	
S3F84ZBXZZ-QX8B S3F84ZBXZZ-TX8B	100QFP 100TQFP	64	2134	90	15/16	BT/WDT/WT/8TCx4/16TCx2	UARTx2, SIO	64/8	10x8	8x4 16x2	12MHz	333	2.0~5.5	-40~85	LVR, IVC, BLD, Voltage Booster&Regulator, PGM, DAC	
S3F866BXZ0-AQ9B S3F866BXZ0-QZ8B S3F866BXZ0-PZ9B	42SDIP 44QFP 44PLCC	64	1040	30	9/2	BT/WDT/8TCx3	IIC	-	8x8	8x7	24MHz	166	2.3~3.6V	-25~85	LVD, POR, Sync Processor, multi-master IIC	
S3F8S18XZZ-S098* S3F8S18XZZ-A098* S3F8S18XZZ-L088*	32SOP 32SDIP 32ELP	8	2K	26 26 26	17/8	BT/WT/8TCx2/16TCx3	UARTx2, IIC,SPI	-	10x8	8x2, 16x3	12MHz	333	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc(8MHz±1%), Ring osc	
S3F8S15XZZ-QZ85* S3F8S15XZZ-TB85* S3F8S15XZZ-LR85*	44QFP 48TQFP 48ELP	16	2K	36 40 40	17/8	BT/WT/8TCx2/16TCx3	UARTx2, IIC,SPI	16/8	10x8	8x2, 16x3	12MHz	333	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc(8MHz±1%), Ring osc	
S3F1xxx (8051) series																
S3FIT0BXZZ-LR8B*	64ELP	64	2K	37	11/5	BT/WDT/16TCx3	UART,IIC,Q,SPI	-	-	8x16	48MHz	83	2.4~5.5	-40 ~ 85	Multi-touch(5-finger),Projected capacitance sensing,32ch touch channel(5" screen size), LVR,Internal RC osc(48MHz±3%)	
S3FI1BGXZZ-TW8G*	80TQFP	384	4K	64	18/12	BT/WT/16TCx3RTC	UART,SPI	32/4	10x7	16x3	24MHz	40ns (25MHz)	1.8~5.5@ 1~4MHz, 2.2~5.5@ 1~12MHz	-40 ~ 85	LVR,LVD,Internal RC osc(8MHz±1%) LDO(3.3V out),PLL,USB1.1,VDMAADPCM Voice Codec,BRJPEG Decoder	
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	DAC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max.Osc. Freq.	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3FKxxx (Calm8) Series																
S3FK11FXZZ-QA8F	128QFP	256	1K	90	13/8	BT/WT/16TCx1/8TCx2	SIO	64/16	10x1	10x1	8x1	8MHz	125	2.4~3.6	-25~85	8x8 Multiplication, Two OP amps
S3FK318XZ0-QZ88	44QFP	8	256	36	7/7	BT/WT/16TCx1/8TCx1	SIO	16/8	10x4	10x1	16x1	8MHz	125	2.0~3.6	-25~85	Frequency Counter

1. * Under Development. Contact Samsung Sales offices for availability.

2. (1) : S/W supported PWM. (2) : Full Flash, Writing endurance is 10K times (3) : Half Flash(MTP), Writing endurance is 100 times

3. Abbreviation

ADC = Analog to Digital converter
DAC = Digital to Analog converter
DTMF = Dual Tone Multi Frequency
FSK=Frequency Shift Keying
CAS=CPE Alerting Signal

SIO = Serial Input/Output
ZCD = Zero Cross Detection Cuircit
PWM = Pulse Width Modulation
Com = Voltage Comparator

LVR=Low Voltage Reset
LVD=Low Voltage Detector
SDT=Stuttered Dial Tone
RDS=Radio Data System

Timer/Counters : BT / WT / WDT = Basic / Watch / Watchdog timer, 8T / 16T = 8-bit / 16-bit Timer/Counter

16-bit Microcontroller

Samsung 8-bit Microcontroller Family																	
Part Name	Package Type	ROM (KBytes)	RAM (Bytes)	I/O Pins	Interrupt (Int/Ext)	Timer/Counter	Serial Interface	LCD (Seg/Com)	ADC (BitxCh)	DAC (BitxCh)	PWM ⁽¹⁾ (BitxCh)	Max. Osc. Freq.	Coprocessor for DSP function	Min Exe. Time (ns)	V _{DD} (V)	OP Temp (°C)	Other Features
S3FCxxx (Calm16) Series																	
S3FC11BXZZ-QX8F S3FC11BXZZ-TX8F	100QFP 100TQFP	64	10K	77	8/9	BT/ WT/8TCx3	SIO	36/8	10x4	-	8x1	40MHz	MAC1616	25	2.0~3.6	-25~85	14-bit ADC/DAC
S3FC34DXZZ-QX8D S3FC34DXZZ-TX8D	100QFP 100TQFP	128	4	90	20/16	BT/ WT/16TCx3/8TCx3	SIOx4 UART	-	10x16	-	8x3, 16x3	12MHz	-	83	2.4~5.5	-25~85	LVR, IVC
S3FC40DXZZ-QX8D S3FC40DXZZ-TX8D S3FC40DXZZ-QA8D	100QFP 100TQFP 128QFP	128	6	90	30/16	BT/ WT/ 16TCx8/8TCx2	SIOx2 UARTx3	-	10x24	-	8x2, 16x8	12MHz	-	83	2.4~5.5	-40~85	LVR, IVC

1. (1) : S/W supported PWM (2) : MTP, Writing endurance is 100 times

2. Abbreviation

ADC = Analog to Digital converter

SIO = Serial Input/Output

DAC = Digital to Analog converter

ZCD = Zero Cross Detection Cuircit

DTMF = Dual Tone Multi Frequency

PWM = Pulse Width Modulation

Com = Voltage Comparator

Timer/Counters : BT / WT / WDT = Basic / Watch / Watchdog timer, 8T / 16T = 8-bit / 16-bit Timer/Counter

32-bit Microcontroller

Samsung 32-bit Microcontroller Family																				
Part Name (New Name) (Full Code by PKG)	CPU	Package Type	ROM/FLASH (KBytes)	Data FLASH (Kbytes)	RAM (Kbytes)	I/O Pins	Interrupt (Int/Ext)	CAN	LIN	Stepper Motor	Timer/Counter	SerialInterface	LCD (Seg/Com)	ADC (BitxCh)	CAPTURE (BitxCh)	PWM (BitxCh)	Max.Osc. Freq.	V _{DD} (V)	OP Temp (°C)	Other Features
CAN/LIN Application																				
S3F4A0KRZZ-EC8K	ARM7TDMI	144LQFP	1024	32	32	111	44/20	4ch.	3ch.	6ch.	WDT(16x1),ST0(16x2), ST1(16x2),ST2(16x2), GPT(16x3),STT(32x1)	SPI0(8x1), SPI1(16x1), IIC(2ch)	40/4	10x16	16x2	8x12,16x2	40MHz	3.0~5.5	-40~105	LDMA, EPC, POR, LVD, Clock monitor
S3F4A0KJZZ-EC8K																			-40~85	
S3F4A1HRZZ-TX8H	ARM7TDMI	100TQFP	512	32	16	74	35/12	2ch.	3ch.	4ch.	WDT(16x1),ST0(16x2), ST1(16x2),GPT(16x3), STT(32x1)	SPI0(8x1), SPI1(16x1), IIC(2ch)	30/4	10x16	16x1	8x8,16x2	40MHz	3.0~5.5	-40~105	LDMA, POR, LVD, Clock monitor
S3F4A1HJZZ-TX8H																			-40~85	
S3F4A2FRZZ-TW8F*	ARM7TDMI	80TQFP	256	-	8	59	31/10	1ch.	2ch.	-	WDT(16x1),ST0(16x2), ST1(16x2),GPT(16x3), STT(32x1)	SPI0(8x1), SPI1(16x1), IIC(1ch)	-	10x16	-	16x8	20MHz	3.0~5.5	-40~105	LDMA, POR, LVD, Clock monitor
S3F4A2FJZZ-TW8F*																			-40~85	
S3FMA1USZZ-EJ8U*	Cortex-M3	176LQFP	1536	48	80	138	77/24	6ch.	6ch.	-	WDT(16x1),ST(16x8), GPT(16x6),STT(32x1)	SPI0(8x1), SPI1(8x1), SPI2(16x1), SPI3(16x1), SPI4(16x1), SPI5(16x1), IIC(1ch)	-	10x40	16x6	8x40, 16x20	75MHz	3.0~5.5	-40~125	LDMA, POR, LVD, Clock monitor
S3FMA1GRZZ-EC8G*	Cortex-M3	144LQFP	384	48	28	115	70/16	3ch.	6ch.	-	WDT(16x1),ST(16x8), GPT(16x6),STT(32x1)	SPI0(16x1), SPI1(16x1), SPI2(16x1), IIC(1ch)	-	10x36	16x6	8x32, 16x16	75MHz	3.0~5.5	-40~125	LDMA, POR, LVD, Clock monitor

1. * Under Development. Contact Samsung Sales offices for availability.

2. Abbreviation

ADC = Analog to Digital converter

BT = Basic Timer

ST = Simple Timer

SSP = Synchronous Serial Port

POR = Power On Reset

WT = Watch Timer

STT = Stamp Timer

IMC = Inverter Motor Controllers

LVD=Low Voltage Detector

WDT = Watchdog Timer

GPT = General Purpose Timer

ENC = Encoder Counter

32-bit Microcontroller

Samsung 32-bit Microcontroller Family																				
Part Name (New Name) (Full Code by PKG)	CPU	Package Type	ROM/FLASH (KBytes)	Data FLASH (Kbytes)	RAM (Kbytes)	I/O Pins	Interrupt (Int/Ext)	IMC (3-phase pair)	ENC	Stepper Motor	Timer/Counter	SerialInterface	LCD (Seg/Com)	ADC (BitCh)	CAPTURE (BitCh)	PWM (BitCh)	Max.Osc. Freq.	V _{DD} (V)	OP Temp (°C)	Other Features
Inverter Motor Application																				
S3F401FXZZ-QX8F	ARM7TDMI	100QFP	256	-	20	65	90/31	2 ch.	2 ch.	-	BTx1, WDTx1, 16BTx6	UARTx2, SSPx2	-	12x15	-	-	90MHz	3.0~3.6	-40~85	16Bit Timer(x6) supports capture and pwm function.
S3FM02GXZZ-TA8G*	Cortex-M3	128TQFP	384	16	24	100	64vectors	2ch. (6-phase)	2ch.	-	BT/WDT/FRT/16TCx8	USARTx4,IICx2,SPb2	40/4	12x8, 10x8	-	16x8	75MHz	2.7~5.5	-40 ~ 85	LDMAx10,LVR,LVD, SWD/JTAG/ETMdebug, Internal RC osc(8MHz±1%)
RFID Application																				
S3C4RU1X00-YG81	ARM7TDMI	121FBGA	24	-	32	8	17	-	3ch	-	WDT(24x1),GPT(32x3)	UARTx1, IICx1	-	-	-	-	19.2MHz	1.65~1.95	-25~85	900MHz UHF RF Interface with EPC global Class1 Gen2
General Purpose																				
S3FN219XZZ-TT89*	Cortex-M0	64TQFP	32	-	2	54	32Vectors	-	-	-	BT/WT/FRT/16TCx5	UARTx2(LINx1), USART,IICx1,SPb1	40/8	10x8	-	16x1	20MHz	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc (20MHz±1%), RFCx2, SWD/JTAG debug
S3FN21BXZZ-TW8B*	Cortex-M0	80TQFP	64	-	4	70	32Vectors	-	-	-	BT/WT/FRT/16TCx6	UARTx3(LINx1), USART,IICx2,SPb2	44/16	10x8	-	16x1	20MHz	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc (20MHz±1%), RFCx2, SWD/JTAG debug
S3FN21CXZZ-TX8C*	Cortex-M0	100TQFP	96	-	4	70	32Vectors	-	-	-	BT/WT/FRT/16TCx6	UARTx3(LINx1), USART,IICx2,SPb2	48/32	10x12	-	16x2	40MHz	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc (20MHz±1%), RFCx3, SWD/JTAG debug
S3FN21DXZZ-TJ8D*	Cortex-M0	176TQFP	128	-	8	112	32Vectors	-	-	-	BT/WT/FRT/ 16TCx6/32TCx2	USB2.0,UARTx3(LINx1), USART,IICx2,SPb2	80/32	10x12	-	16x2	40MHz	1.8~5.5	-40 ~ 85	LVR,LVD,Internal RC osc (20MHz±1%), DMA, SWD/JTAG debug
S3FN60DXZZ-QT8D*	Cortex-M0	64QFP	128	-	8	50	29/32	-	-	-	BT/WT/8TCx1 32TCx4	USB2.0,UARTx1 IICx2,SPb2	-	12x8	32x3	32x3	12MHz	1.6~3.6	-25 ~ 85	LVR,LVD,Internal RC osc (32.768KHz±50%), JTAG debug, DMA
Industrial																				
S3FN41BXZZ-TB8B*	Cortex-M0	48TQFP	64	-	8	34	32Vectors	1ch. (6-phase)	1ch.	-	BT/WDT/FRT/ 16TCx5/32TCx2	CAN,USB2.0,USARTx3 (LINx3),IICx2,SPb2	28/8 (32/4)	12x10	-	16x2	40MHz	1.8~5.5	-40 ~ 85	OP-ampx3,10-bit DACx1, LDMAx6,LVR,LVD,SWD debug
S3FN41DXZZ-TT8D*	Cortex-M0	64TQFP	128	-	8	50	32Vectors	1ch. (6-phase)	1ch.	-	BT/WDT/FRT/ 16TCx5/32TCx2	CAN,USB2.0,USARTx3 (LINx3),IICx2,SPb2	28/8 (32/4)	12x10	-	16x2	40MHz	1.8~5.5	-40 ~ 85	OP-ampx3,10-bit DACx1, LDMAx6,LVR,LVD,SWD debug
S3FN41FXZZ-TW8F*	Cortex-M0	80TQFP	256	-	32	64	32Vectors	1ch. (6-phase)	1ch.	-	BT/WDT/FRT/ 16TCx5/32TCx2	CAN,USB2.0,USARTx3 (LINx3),IICx2,SPb2	28/8 (32/4)	12x10	-	16x2	40MHz	1.8~5.5	-40 ~ 85	OP-ampx3,10-bit DACx1, LDMAx6,LVR,LVD,SWD debug
S3FN41HXZZ-TX8H*	Cortex-M0	100TQFP	512	-	64	80	32Vectors	1ch. (6-phase)	1ch.	-	BT/WDT/FRT/ 16TCx6/32TCx2	CANx2,USB2.0,USART x4(LINx4),IICx3,SPb2	28/8 (32/4)	12x10	-	16x2	40MHz	1.8~5.5	-40 ~ 85	OP-ampx3,10-bit DACx1, LDMAx6,LVR,LVD,SWD debug
S3FN41KXZZ-TC8K*	Cortex-M0	144TQFP	1024	-	64	124	32Vectors	1ch. (6-phase)	1ch.	-	BT/WDT/FRT/ 16TCx6/32TCx2	CANx2,USB2.0,USART x4(LINx4),IICx3,SPb2	28/8 (32/4)	12x10	-	16x2	40MHz	1.8~5.5	-40 ~ 85	OP-ampx3,10-bit DACx1, LDMAx6,LVR,LVD,SWD debug

1. * Under Development. Contact Samsung Sales offices for availability.

2. Abbreviation

ADC = Analog to Digital converter
POR = Power On Reset
LVD=Low Voltage Detector

BT = Basic Timer
WT = Watch Timer
WDT = Watchdog Timer

ST = Simple Timer
STT = Stamp Timer
GPT = General Purpose Timer

SSP = Synchronous Serial Port
IMC = Inverter Motor Controllers
ENC = Encoder Counter

Serial EEPROM

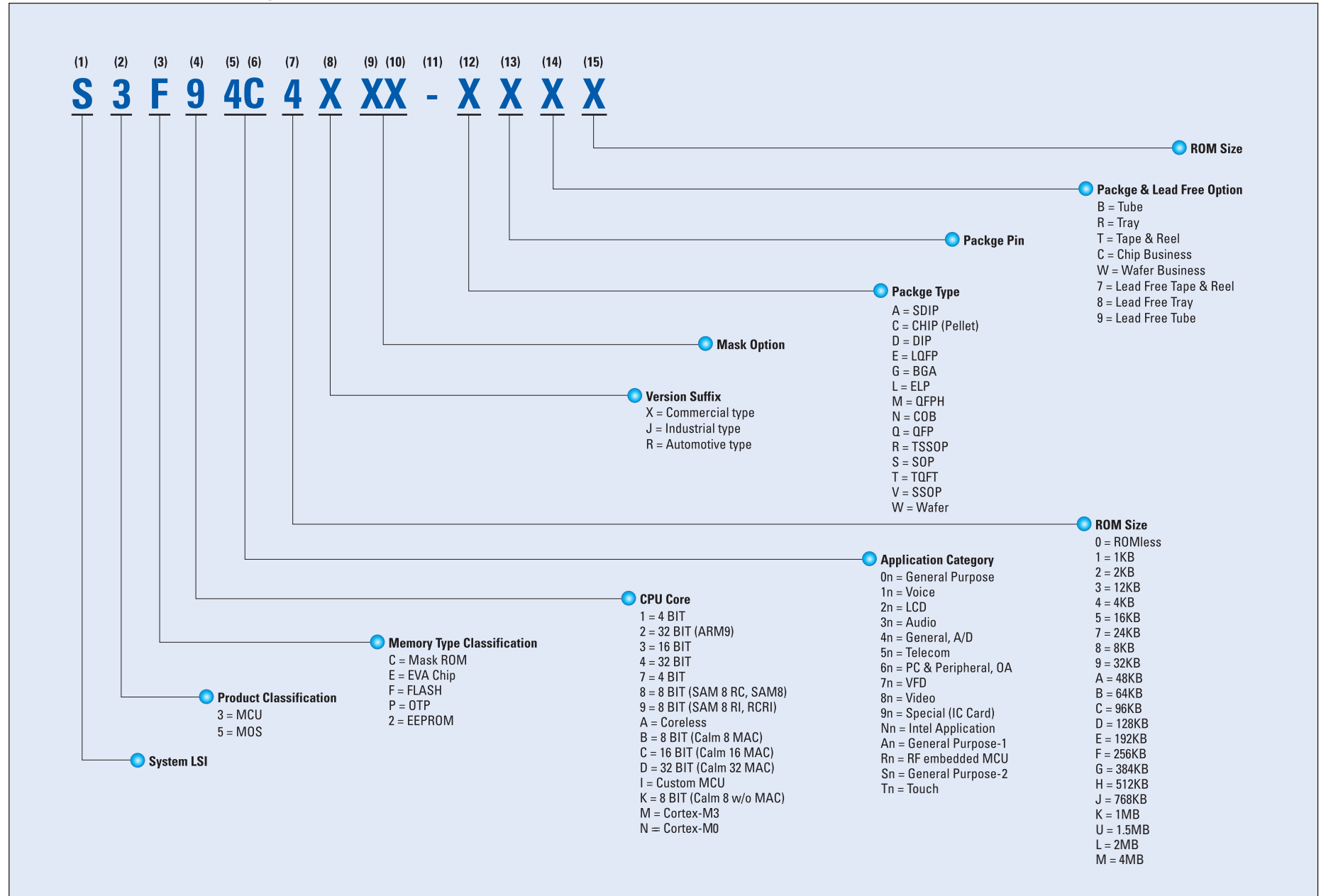
Part Name	Density (Bit)	Write Protection	V _{DD} (V)	Write Cycle Time (Max)	Interface	Package
S524A4DX20-RC70 S524A4DX21-DC90 S524A4DX21-SC90 S524A4DX21-SC70	2K	by Hardware and Software	1.8 ~ 5.5 V	5 ms	I ² C	DC90=8DIP SC90=8SOP (Tube) SC70=8SOP RC70=8TSSOP (T&R)
S524A4DX41-DC90 S524A4DX41-SC90 S524A4DX41-SC70	4K	by Hardware				

EOL List

Master	EOL Notification	New Code Stop	Last Order	Last Shipment	Replacable Product	Master	EOL Notification	New Code Stop	Last Order	Last Shipment	Replacable Product
831B	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F833B	7515	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
80A5	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F80K5	9004	2007.08.31	2008.01.31	2008.04.30	2008.07.31	S3F84I8
863A	2007.08.31	2008.06.30	2008.09.30	2008.12.31		82F5	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
80B5	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F80K5	84DB	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
80F9	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F80K9	K225	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
80G9	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F80K9	8647	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
9688	2007.08.31	2008.06.30	2008.09.30	2008.12.31		8849	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
7054	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F80L4	80C5	2007.08.31	2008.01.31	2008.04.30	2008.07.31	S3F80K5
7565	2007.08.31	2008.06.30	2008.09.30	2008.12.31		851B	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
8469	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F84NB	7414	2007.08.31	2008.01.31	2008.04.30	2008.07.31	S3F84I8
9414	2007.08.31	2008.06.30	2008.09.30	2008.12.31		7528	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
72E8	2007.08.31	2008.06.30	2008.09.30	2008.12.31		7544	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
72G9	2007.08.31	2008.06.30	2008.09.30	2008.12.31		7559	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
72N5	2007.08.31	2008.06.30	2008.09.30	2008.12.31		8454	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
9428	2007.08.31	2008.06.30	2008.09.30	2008.12.31		9404	2007.08.31	2008.01.31	2008.04.30	2008.07.31	S3F84Q5
8475	2007.08.31	2008.06.30	2008.09.30	2008.12.31		9434	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
7235	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F8285	9648	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
84BB	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F84MB	72B9	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
72H8	2007.08.31	2008.06.30	2008.09.30	2008.12.31	S3F82I9	72C8	2007.08.31	2008.01.31	2008.04.30	2008.07.31	
880A	2007.08.31	2008.01.31	2008.04.30	2008.07.31		72F5	2007.08.31	2008.01.31	2008.04.30	2008.07.31	

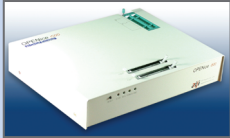
MCU Product Numbering Guide

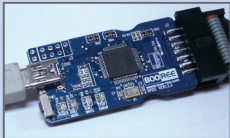
PAGE 11



Samsung MCU Tool Guide

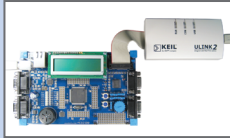
In-Circuit Emulators

8-BIT SAM8 MCU			
Name (Tool Supplier)	OPENice-i500 (YIC)	OPENice-i2000 (YIC)	SK-1200 (SEMINIX)
Features	• Support SAM4/8 • RS232C Communication • Real time emulation at full processor speed • Flash MCU debugging support • 64KB Emulation Memory • Real Time Trace (32KB) • Run Time View • OTP/MTP Programming	• Support SAM8 • USB2.0 or RS232C interface with PC • Real time emulation at full processor speed (25MHz) • Real time RAM display • Flash mode debugging • Real time trace (32K step) • Emulation Memory (64KB) • Free S/W IDE (OPENice-SLD) • OPT/MTP/FLASH programming	• Support SAM8 • USB2.0 or RS232C interface with PC • Real-time emulation at full processor speed(Max 30MHz) • IAR C-compiler & Debugger support (C-SPY) • Real time RAM break & real time RAM display • Real time trace • Sub-clock run mode debugging • Adjustable VDD voltage of target CPU (3.0 ~ 5.0V) • OPT/MTP/FLASH programming
Picture			

8-BIT R8051 MCU		
Name (Tool Supplier)	SPICE (BOOREE MULTIMEDIA)	GenICE3000 (CORERIVER)
Features	• Support 8051 CPU • JTAG based USB v1.1 Communication • Flash MCU debugging supported with 4 break points • Run Time View • FLASH Programming • Stand-alone Single Writer Programmer	• Support MiDAS serie / TouchCore serie / ATOM serie(4Bit) • Real time RAM display • USB2.0 PC interface • Free debugging S/W (Gentos) • Flash programming • Software and hardware breakpoint and watch-point • Easy Firmware upgrade • Target voltage (3.3V / 5.0V)
Picture		

Samsung MCU Tool Guide

In-Circuit Emulators

32-bit ARM MCU			
Name (Tool Supplier)	OPENice-A1000 (YIC)	SK-3200 (SEMINIX)	RealView-MDK (ARM)
Features	• Support ARM7/9/10/11, Cortex-M3 • Multi-processor & multi-core debugging • USB2.0 PC interface (2Mbps downloading) • Free debugging S/W (OPENice-EDS) • Stand-alone Flash programming • 3rd party debugger support (AXD/ADW/C-SPY) • Easy Firmware upgrade via internet	• Support ARM7/9/10/11, Intel PXA250 • 3rd party debugger support (AXD/ADW) • Software and hardware breakpoint and watch-point • JTAG-based hardware interface • Open debugger Interface: ARM standard RDI 1.5.1 interface • Compatible ARM SDT / ADS debuggers • Wide range of target voltage (1.8 ~ 5.0V)	• RealView C/C++ Compiler • Keil uVision IDE/Debugger • Support ARM7/9 and Cortex-M3 • High Speed Single Stepping: upto 100 steps/sec • Wide range of target voltage (1.0 ~ 5.0V) • USB 1.1, 2.0 connection • Ethernet 10/100baseT remote and local host connection
Picture			
Name (Tool Supplier)	Trace32-ICD (Lauterbach(Korea:MDS))	Jlink (IAR)	
Features	• Support ARM7/9/10/11, Cortex-M3/M0 • Multi-processor & multi-core debugging • USB2.0 PC interface (2Mbps downloading) • Stand-alone Flash programming	• Support ARM7/9/10/11, Cortex-M3/M1/M0 • USB2.0 interface • JTAG speed upto 12MHz • Serial Wire Debug (SWD) support • Stand-alone flash programming • Wide range of target voltage (1.0 ~ 5.0V) • Seamless integration into IAR embedded Workbench IDE	
Picture			

Samsung MCU Tool Guide

OTP / FLASH Programmers

Name (Tool Supplier)	GW-uni (SEMINIX)	AS-pro (SEMINIX)
Features	• All Samsung OTP/MTP • 8-Gang Programmer • Stand-alone(No PC) • Touch Key	• All Samsung OTP/MTP • Portable & Stand-alone • 128MB internal memory
Picture		

OTP/FLASH Adapter

Separate OTP/FLASH adapter is required to write/erase Samsung OTP/FLASH MCU by using GW-uni from Seminix Co. Ltd.
Please, contact Seminix Co. Ltd. for detail information.
Contact information for Seminix is on the last page.

MCU TOOL SUPPLIERS

YIC

#308, Fitech New Technology Business Center
111-7 Kuyun-Dong, Kwonsun-Gu,
Suwon-City, Gyeonggi-do, Korea 441-814
Tel : 82-31-278-0461
Fax: 82-31-278-0463
E-mail: pyang@yicsystem.com
URL: www.yicsystem.com

ARM LTD.

110 Fulbourn Road, Cambridge, UK
CB1 9NJ United Kingdom
E-mail: order-europe@arm.com
URL: www.arm.com

SEMINIX CO., LTD.

2nd Fl. EGTel Building, #835-8 Yoksam-Dong,
Kangnam-Gu, Seoul, 135-080, Korea
Tel : 82-2-539-7891
Fax: 82-2-539-7819
E-mail: sales@seminix.com
URL: www.seminix.com

MERITECH CO., LTD.

4th Fl, Agaworld B/D, 1357-74 Seocho-Dong,
Secho-Gu, Seoul, Korea
Tel : 82-2-586-8203
Fax: 82-2-588-7868
E-mail: sales@meritech.co.kr
URL: www.meritech.co.kr

BOOREE MULTIMEDIA INC.

6F, Hans B/D, 111-55 Seongnae-Dong,
Gangdong-Gu, Seoul, Korea
Tel : 82-2-2203-1340
Fax: 82-2-2203-1344
E-mail: sales@boo-ree.com
URL: www.boo-ree.com

CORERIVER

13Fl, West Wing, IT Venture Tower
78, Garakbon-Dong, Songpa-Gu
Seoul, 138-950, Korea
Tel : 82-2-2142-3400
Fax: 82-2-2142-3409
E-mail: sales@coreriver.com
URL: www.coreriver.com

IAR SYSTEMS AB

Strandbodgatan 1, Uppsala, Sweden
Tel : 46-18-16-78-00
Fax: 46-18-16-78-38
E-mail: info@iar.se
URL: www.iar.com

MDS TECHNOLOGY CO.,LTD.

#222-7, 15F Kolon Digital Tower Vilant
Guro-3 Dong, Guro-Gu
Seoul, 152-777, Korea
Tel : 82-2-2106-6000
Fax: 82-2-2106-6004
E-mail: trace32@mdstec.com
URL: www.mdstec.com
www.lauterbach.com

MCU CHANNELS

KOREA

CHIPSLINE CO., LTD.

Room 1121, Chonggu Bluevill,
11-1 Sunae-Dong, Bundang-Gu,
Sungnam City, Kyungki-Do, Korea 463-020
Tel : 82-31-719-5460
Fax: 82-31-719-5457
E-mail: bingo@chipsline.com

CORE SYSTEM

Room 504, Kolon Science Valley 1,
187-10 Kuro-Dong, Kuro-Gu, Seoul, Korea
Tel : 82-2-2025-4577
Fax: 82-2-2025-4576
E-mail: kcc1747@unitel.co.kr

HAGA ELECTRONICS CO., LTD.

Room 313, Daewoo The O ville,
22-5 Shingil-dong, Youngdeungpo-ku,
Seoul, Korea 150-837
Tel : 82-2-844-4720
Fax: 82-2-834-2996
E-mail: hg@haga.co.kr

M.I KOREA

Room 722, 7F, Byucksan/Kyungin Digital Valley2,
481-10 Kasan-Dong, Kumchun-Gu, Seoul,
Korea 153-783
Tel : 82-2-2113-1107
Fax: 82-2-2113-1109
E-mail: mikor@hanafos.com

SEMINIX CO., LTD.

2F, EGTel Building, 835-8 Yoksam-Dong,
Kangnam-Gu, Seoul, Korea 135-080
Tel : 82-2-539-7891
Fax: 82-2-539-7819
E-mail: sales@seminix.com

WATLOGIC CO., LTD.

Room 1511, Daerung Technotown 8,
481-11 Gasan-Dong, Gumchun-Gu,
Seoul, Korea
Tel : 82-2-3281-8848
Fax: 82-2-3281-8857
E-mail: mcuprovider@watlogic.co.kr

YAMU SOLUTIONS

Room A-1002, Yeongtong Digital Empire,
980-3 Yeongtong-Dong, Yeongtong-Gu,
Suwon-Si, Kyonggi-Do, Korea
Tel : 82-31-303-8420
Fax: 82-31-303-8425
E-mail: steveyoon@bec.co.kr

YELIMSA CO., LTD.

15, Pasan-Ri, Goa-Eup, Gumi-Si,
Kyeongsangbuk-Do, Korea
Tel : 82-54-482-5585
Fax: 82-54-482-5583
E-mail: bj@yelimsa.co.kr

CHINA

YAMU SOLUTIONS HK LTD.

Room C702, Skyworth Building,
Hi-Tech Industrial Park, Nanshan District,
Shennan Road, Shenzhen, China
Tel : 86-755-2674-3280
Fax: 86-755-2674-3281
E-mail: jtp@yamu.co.kr
URL: www.yamu.co.kr

CYBER ELECTRONICS COMPANY

Room 11A3, Zone A,
Tai Ping Yang Commercial & Trade Building,
No. 4028 Jiabin Road, Shenzhen, China
Tel : 86-755-8213-8015
Fax: 86-755-8213-8002
E-mail: calvin@cyber-electronics.com

MC&T ELECTRONICS LTD.

Unit 704, 7F, Hang Ngai Jewelry Centre
4 Hok Yuen Street East, Hung Hom, Kln,
Hong Kong
Tel : 852-2191-5009
Fax: 852-2380-5247
E-mail: jspark@netvigator.com

WISEWORLD ELECTRONICS LTD.

Room 1805, 18F, International Chamber of
Commerce Tower, Inter-junction of Fuhua
3 Road and Yitian Road (Facing Shenzhen
Exhibition Center) Central District,
Shenzhen, China
Tel : 86-755-8831-5588
Fax: 86-755-8831-5566
E-mail: eugene@wiseworld.com.hk
URL: www.wiseworld.com.hk

WISEWORLD ELECTRONICS LTD.

Room 1108, Huawei Building,
999 Zhongshanxi Road, Shanghai, China
Tel : 86-21-3250-3672
Fax: 86-21-3250-3674
E-mail: peterdoh@wiseworld.com.hk
URL: www.wiseworld.com.hk

AMS TECHNOLOGY CO., LTD.

Room 915-916, South Block,
Cangsong B/D, Terra Industry Park,
Futian District, Shenzhen, China
Tel : 86-755-8349-6965/6986/6925
Fax: 86-755-8349-6971
E-mail: ams@amstech.cn
URL: www.amstech.cn

AMSS COMPANY LTD.

Room 210, Hualian Development Building,
No.728 XinHua RD, Shanghai, China
Tel : 86-21-5258-8171
Fax: 86-21-5258-8173
E-mail: kmkim@amstech.cn
URL: www.amstech.cn

LI SENG TECHNOLOGY LTD.

9F, Shiu Fung Hong Building,
239-241 Wing Lok Street, Hong Kong
Tel : 852-2540-8348 / 86-755-2652-3481
Fax: 852-2547-5706 / 86-755-2652-3494
E-mail: sales@liseng.com.hk
URL: www.liseng.com.hk

YOSUN SHANGHAI CO., LTD.

15F, Nextage Business Center No.1111,
PuDong South Road, PuDong New District,
Shanghai, China
Tel : 86-21-5836-5838 ext.7099
Fax: 86-21-5835-5869
E-mail: Jason_Pan@cn.yosungroup.com
URL: www.yosungroup.com

BEIJING TSINGHUA UNISPLENDOR ME SYSTEM CO., LTD.

Room B602, XueYan Bd.,
Tsinghua University, Beijing, China
Tel : 861-6277-1869/68/55
Fax: 861-6277-1858
E-mail: chenzhaochun@tsinghua.org.cn

EUROPE

EBV ELEKTRONIK GmbH & CO KG

Im Technologiepark 2-8
85586 Poing, Germany
Tel : 49-8121-774-0
Fax: 49-8121-774-422
URL: www.ebv.com

MSC VERTRIEBS GmbH

Industriestraße 16
76297 Stutensee, Germany
Tel : 49-7249-910-0
Fax: 49-7249-799-3
E-mail: Stutensee@msc-ge.com
URL: www.msc-ge.com/de/home/
home/index.html

GREENHILL ELEKTRONIK GmbH

Bahnhofstr. 17
35305 Grünberg, Germany
Tel : 49-6401-225990
Fax: 49-6401-2259939
E-mail: info@greenhill.de
URL: www.greenhill.de/index.
php site=index

AMERICA

NEW TECH SOLUTIONS

26 Ray Avenue, Burlington, MA 01803
Tel : 1-781-229-8888
Fax: 1-781-229-1614
URL: www.ntsma.com

I SQUARED

224 Airport Parkway, Suite 150,
San Jose, CA 95110
Tel : 1-408-988-3400
Fax: 1-408-988-2079
URL: www.isquared.com/

NECCO

11 Oval Drive, Suite 169, Islandia,
New York 11749
Tel : 1-631-234-2525
Fax: 1-631-234-2707
E-mail: idurante@neccoelect.com
URL: www.neccoelect.com

RATHSBURG ASSOCIATES, INC.

41100 Bridge Street, Novi, MI 48375 USA
Tel : 1-248-615-4000
Fax: 1-248-615-4001
E-mail: mail@rathsburg.com
URL: www.Rathsburg.com

REP ONE ASSOCIATES

303 Williams Ave., Suite 1011,
Huntsville, AL 35801
Tel : 1-256-539-7371
Fax: 1-256-533-4509
E-mail: tdaniel@repon.com
URL: www.repon.com

PLATINUM ASSOCIATES

17300 Redhill Ave., Suite 105,
Irvine, CA 92614
Tel : 1-949-266-2900
Fax: 1-949-851-2251
E-mail: sales@platinumassoc.com
URL: www.platinumassoc.com

WEST ASSOCIATES, LLC

17000 Dallas Parkway, Suite 200,
Dallas, TX 75248
Tel : 1-972-680-2800
URL: www.westassociates.com

CUSTOMER1st

2950 Metro Drive, Suite 101,
Minneapolis, MN 55425
Tel : 1-952-851-7909
URL: www.customer1st.com

INTELETECH

5225 Orbitor Drive, Suite 2
Mississauga, ON Canada L4W 4Y8
Tel : 1-800-465-2679
Fax: 1-905-629-1795
E-mail: sales@intelitech.com
URL: www.intelitech.com

SINGAPORE

YOSUN SINGAPORE PTE LTD.

159 Sin Ming Road #04-04
Amtech Building Singapore 575625, Singapore
Tel : 65-6552-4811
Fax: 65-6552-5811
E-mail: chrisann@yosun.com.sg
tk_chin@yosun.com.sg
URL: www.yosungroup.com

COMSOC TECHNOLOGY PTE LTD.

No.8 Boon Lay Way, #07-09 To #07-13,
Tradehub 21 Singapore 609964, Singapore
Tel : 65-6425-2212
Fax: 65-6425-2022
E-mail: kt.fong@comsoc.com
ivan.koo@comsoc.com
URL: www.comsoc.com

EXCELPPOINT SYSTEMS PTE LTD.

15 Changi Business Park Central 1
6th Level Singapore 486057, Singapore
Tel : 65-6741-8966
Fax: 65-6741-8316
E-mail: Raymond.Gan@ExcelPoint.com.sg
URL: www.excelpoint.com

AV CONCEPT SINGAPORE PTE LTD.

219 Henderson Road #10-01,
Henderson Industrial Park,
Singapore 159556, Singapore
Tel : 65-6276-5130
Fax: 65-6276-5132
E-mail: eric.ho@avconcept.com
URL: www.avconcept.com

TAIWAN

YOSUN INDUSTRIAL CO., LTD.

9F, No.489, Tiding Ave., Sec.2,
Nei Hu, Taipei, Taiwan
Tel : 886-2-2659-8168
Fax: 886-2-2659-7869
E-mail: bruce_lu@yosungroup.com
URL: www.yosungroup.com/yosun/index.do

FIRSTEC ELECTRONIC CO., LTD.

5F-1, No.3-1, YuanQu Street, Taipei 115,
Taiwan (Nangang Software Park)
Tel : 886-2-2655-7400
Fax: 886-2-2655-7461
E-mail: henrylee@firstec.com.tw



SAMSUNG ELECTRONICS Semiconductor Business

SEMICONDUCTOR BUSINESS SALES & MARKETING DIVISION

San #24 Nongseo-Dong, Kiheung-Gu,
Yongin-City, Kyunggi-Do, Korea
Tel : 82-31-209-1926
Fax: 82-31-209-1909

SAMSUNG SEMICONDUCTOR INC.

3655 North First Street,
San Jose, CA 95134 U.S.A.
Tel : 1-408-544-4000
Fax: 1-408-544-4980

SAMSUNG SEMICONDUCTOR INC. IRVINE OFFICE

3351 Michelson Drive, Suite 250,
Irvine CA 92612
Tel : 1-949-975-7000
Fax: 1-949-975-7147

SAMSUNG SEMICONDUCTOR EUROPE GmbH

65760 Koelner Strasse 12,
Eschborn, Germany
Tel : 49-6196-666665
Fax: 49-6196-663255

SAMSUNG SEMICONDUCTOR EUROPE LTD

Great West House, Great West Road,
Brentford, Middlesex Tw8 9Dq, UK
Tel : 44-208-3807200
Fax: 44-208-3807220

SAMSUNG SEMICONDUCTOR FRANCE LTD

Centre D affaires, a Boursidiere Rn186,
bat Champagne, bp202, f-92357,
Le Plessis Robisson
Tel : 33-1-4601-7180
Fax: 33-1-4094-0216

SAMSUNG JAPAN CORPORATION

ROPPOINGI T-CUBE
3-1-1, Roppongi, Minato-ku
Tokyo 106-8532, Japan
Tel : 81-3-6234-2338
Fax: 81-3-6234-2336

OSAKA BRANCH

6Fl., Crystal Tower, 2-27, 1-Chrome,
Shiomi Chuo-Ku, Osaka 540-6006, Japan
Tel : 81-6-6949-4848
Fax: 81-6-6949-5133

SAMSUNG ASIA PRIVATE LIMITED

3 Church Street, #24-01/02 Samsung Hub
Singapore 049483
Tel : 65-68333-456
Fax: 65-68333-476

SAMSUNG ELECTRONICS HONG KONG CO., LTD.

33/F, Central Plaza 18 Harbour Road,
Wanchai, Hong Kong
Tel : 852-2862-6900
Fax: 852-2866-1343

SAMSUNG ELECTRONICS SHENZHEN CO., LTD.

46 FL., New World Center, 6009 Yitian Road,
Futian District, ShenZhen, China
Tel : 86-755-8608 5888
Fax: 86-755-8608 5799

SAMSUNG ELECTRONICS SHANGHAI CO., LTD.

15F Cloud Nine Plaza, No.1118
Yan An (W) RD Shanghai, China
Tel : 86-21-52582211
Fax: 86-21-52582595-5258/2633

SAMSUNG ELECTRONICS CO., LTD. SEMICONDUCTOR BUSINESS BEIJING OFFICE

26/F China Merchants Tower, No.118,
Jian Guo Lu, Chao Yang District,
Beijing, China, 100022
Tel : 86-10-6566-8100
Fax: 86-10-6566-9410

SAMSUNG ELECTRONICS TAIWAN CO., LTD.

10F, No399, Rui Guang Rd.,
Neihu Dist Taipei, Taiwan
Tel : 886-2-2656-8686
Fax: 886-2-2656-8159

**The appearance and specifications about the product is subject to change for improvement without a notice.*

**The information in this catalogue was updated April, 2008.*