

Product	Program Memory EE-Flash		Data SRAM Bytes	Max Speed (MHz)	Instr Cycle Time (nsec)	Interrupts			I/O Pins	Brown Out Detect	Analog Comp- arators	Timers			Other Features	Operating Temp Range (°C)	Operating Voltage Range (V)	Package	Availability	
	Bytes	Words				Type		Response Int/Ext (nsec)				8-bit	16-bit	WDT					Samp	Prod
						Int	Ext													
SX18/20/28 Standard Devices																				
SX18AC/DP	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1	30mA source/sink per I/O, Internal RC Oscillator, Virtual Peripheral™ platform	0° to 70°	2.7V - 5.5V	SDIP-18	Now	Now
SX18AC/SO	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1		0° to 70°	2.7V - 5.5V	SOIC-18	Now	Now
SX20AC/SS	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1		0° to 70°	2.7V - 5.5V	SSOP-20	Now	Now
SX28AC/DP	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		0° to 70°	2.7V - 5.5V	SDIP-28	Now	Now
SX28AC/SO	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		0° to 70°	2.7V - 5.5V	SOIC-28	Now	Now
SX28AC/SS	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		0° to 70°	2.7V - 5.5V	SSOP-28	Now	Now
SX18/20/28 Industrial Temp Devices																				
SX18AC-I/DP	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1	30mA source/sink per I/O, Internal RC Oscillator, Virtual Peripheral™ platform	-40° to +85°	2.7V - 5.5V	SDIP-18	Now	Now
SX18AC-I/SO	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1		-40° to +85°	2.7V - 5.5V	SOIC-18	Now	Now
SX20AC-I/SS	3072	2048x12	136	50	20	1	8	60/100	12	2.2/2.6/4.2V	1	1	0	1		-40° to +85°	2.7V - 5.5V	SSOP-20	Now	Now
SX28AC-I/DP	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		-40° to +85°	2.7V - 5.5V	SDIP-28	Now	Now
SX28AC-I/SO	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		-40° to +85°	2.7V - 5.5V	SOIC-28	Now	Now
SX28AC-I/SS	3072	2048x12	136	50	20	1	8	60/100	20	2.2/2.6/4.2V	1	1	0	1		-40° to +85°	2.7V - 5.5V	SSOP-28	Now	Now
SX18/20/28 Extended Speed Devices																				
SX18AC75/DP	3072	2048x12	136	75	13.33	1	8	39.9/66.5	12	4.2V	1	1	0	1	30mA source/sink per I/O, Internal RC Oscillator, Virtual Peripheral™ platform	0° to 70°	4.5V - 5.5V	SDIP-18	Now	Now
SX18AC75/SO	3072	2048x12	136	75	13.33	1	8	39.9/66.5	12	4.2V	1	1	0	1		0° to 70°	4.5V - 5.5V	SOIC-18	Now	Now
SX20AC75/SS	3072	2048x12	136	75	13.33	1	8	39.9/66.5	12	4.2V	1	1	0	1		0° to 70°	4.5V - 5.5V	SSOP-20	Now	Now
SX28AC75/DP	3072	2048x12	136	75	13.33	1	8	39.9/66.5	20	4.2V	1	1	0	1		0° to 70°	4.5V - 5.5V	SDIP-28	Now	Now
SX28AC75/SO	3072	2048x12	136	75	13.33	1	8	39.9/66.5	20	4.2V	1	1	0	1		0° to 70°	4.5V - 5.5V	SOIC-28	Now	Now
SX28AC75/SS	3072	2048x12	136	75	13.33	1	8	39.9/66.5	20	4.2V	1	1	0	1		0° to 70°	4.5V - 5.5V	SSOP-28	Now	Now
SX48/52BD Standard Devices																				
SX48BD/TQ	6144	4096x12	262	50	20	3	8	60/100	36	4.2V	1	1	2	1	30mA source/sink per I/O, 2Capture/Compare/PWM, Internal RC Oscillator, Virtual Peripheral™ platform	0° to 70°	3.0V - 5.5V	TQFP-48	Now	Now
SX52BD/PQ	6144	4096x12	262	50	20	3	8	60/100	40	4.2V	1	1	2	1		0° to 70°	3.0V - 5.5V	PQFP-52	Now	Now
SX52BD100/PQ	6144	4096x12	262	100	10	3	8	30/50	40	4.2V	1	1	2	1		0° to 70°	4.75V - 5.25V	PQFP-52	Now	Now

Market Segment		Applications	Applications Requirements	SX Solution
Telecom	Internet Connectivity	<ul style="list-style-type: none"> Security Systems Vending Machines Card Readers Utility Meters Building Control Home Automation Devices Communication Equipment Factory Automation Home Appliances 	Web-Serving: <ul style="list-style-type: none"> Web monitoring and control Serving any type of resources such as HTML, images, Java applets, PDF files Capable of communication with any web-browser Physical Layer + Internet protocol implementation E-mail Appliance: <ul style="list-style-type: none"> E-mail appliance function - send/receive Physical layer + Internet protocol implementation 	SX-Stack: <ul style="list-style-type: none"> Complete TCP/IP + Physical layer interface implementation iSx Web server eSx E-mail appliance Implementation of various standard protocols such as PPP, IP, ICMP, TCP, SMTP, HTTP SX52BD device as the hardware platform
	Embedded Modems	DTMF ENCODER/DECODER <ul style="list-style-type: none"> Least Cost Routers Auto Dialer PBX Analog Line Testers Pay Phones Specialty Phones 	<ul style="list-style-type: none"> DTMF Encoding/Decoding I²C/UART Interface Call Progress Detection/Generation 	<ul style="list-style-type: none"> DTMF Detection/Generation 2400-11.5Kbps UART I²C Call Progress function In-System Programming 8-bit hardware timer with 8-bit prescaler 16-bit software timer
		BELL 202 W/ DTMF ENCODER/DECODER AND CALLER ID <ul style="list-style-type: none"> Digital Answering Machine Smart Phones Caller ID Least Cost Routers Remote Data Gathering POS Systems Security Systems Vending Machines ATMs 	<ul style="list-style-type: none"> DTMF Encoding/Decoding Caller ID function I²C/UART interface FSK decoder for Caller ID Call Progress Detection Voice storage Answering machine functions PWM generation Display drive 	<ul style="list-style-type: none"> 1200bps FSK Encoding/Decoding DTMF Encoding/Decoding 2400-11.5Kbps UART In-System Programming 8-bit hardware timer with 8-bit prescaler 16-bit software timer Caller ID Function I²C/UART Interface LED/LCD direct drive Digital answering machine control functions
Other Telephony	<ul style="list-style-type: none"> PCS Repeaters Wireless Communications Pagers Telephony on TV Remote Control of HVAC Set Top Box Modem Wave Division Mux/Fiber Optics 	<ul style="list-style-type: none"> DTMF Encoding/Decoding Caller ID function I²C/UART interface FSK decoder for Caller ID Voice storage PWM generation Display drive 	<ul style="list-style-type: none"> 1200bps FSK Encoding/Decoding DTMF Encoding/Decoding Call Progress function 2400-11.5Kbps UART In-System Programming 8-bit hardware timer with 8-bit prescaler 16-bit software timer I²C/UART Interface LED/LCD direct drive 	
Video	<ul style="list-style-type: none"> Set Top Box on-Screen Overlay Video Games Video Test Equipment Video on Demand 	<ul style="list-style-type: none"> Character generation Real-Time data capture and processing Smooth character generation 	<ul style="list-style-type: none"> Synchronous I/O operation Deterministic program execution flow Data capture at video clock speed Program execution at video clock speed Internal execution freq. same as video clock freq. 	
	<ul style="list-style-type: none"> Digital Camera for Security Systems 	<ul style="list-style-type: none"> Real-Time video data capture High speed video data processing Video data synchronization Automatic White Balance function 	<ul style="list-style-type: none"> Synchronous I/O operation Deterministic program execution flow Data capture at video clock speed Program execution at video clock speed Internal execution freq. same as video clock freq. 	
DSP/FPGA/PLD/ASIC Replacement	<ul style="list-style-type: none"> Speaker Phone Systems Closed Loop Servo Motor Control Interactive Toys Protocol Converters Voice Note Magnetic-Strip Readers Barcode/Image Scanners Digital Audio 	<ul style="list-style-type: none"> Low cost digital filtering Smooth waveform generation PWM generation PLA function Multiple state machine implementation Communications protocols such as: "CAN, IrDA, UDP/PPP, TCP/IP" 	<ul style="list-style-type: none"> DSP-Like capabilities Up to 100 MIPS performance Predictable program execution Digital filter within the bandwidth of Audio Signal Processing 	