



# Rabbit Semiconductor

## SBC4S200 Series

### Single-board computer

Features				
<b>Microprocessor</b>	Rabbit® 4000 @ 58.98 MHz		Rabbit® 5000 @ 73.73 MHz	Rabbit® 4000 @ 29.49 MHz
<b>Network Interface</b>	10/100Base-T, 3 LEDs	10Base-T, 2 LEDs	Wi-Fi (802.11b/g)	ZigBee PRO Feature Set
<b>Flash Memory (Program)</b>	512 KB (Serial Flash)	512 KB (Parallel Flash)	1 MB (Parallel Flash)	512 KB (Parallel Flash)
<b>Flash Memory (Data Storage)</b>	miniSD™ Card 128 MB to 1 GB		-	
<b>Program Execution SRAM</b>	512 KB	-	1 MB	-
<b>Data SRAM</b>	512 KB			
<b>Backup Battery</b>	Renata CR2032 or equivalent 3 V lithium coin type, 235 mA·h standard, socket-mounted			
<b>Configurable I/O</b>	32 individually software-configurable I/O channels may be configured as digital inputs 0–36 V DC, switching threshold 1.4 V/1.9 V typical, or as sinking digital outputs up to 40 V, 200 mA each			
<b>High-Current Digital Outputs</b>	8 outputs individually software-configurable as sinking or sourcing, +40 V DC, 2 A max. per channel			
<b>Analog Inputs</b>	Eight 11-bit res. channels, software-selectable ranges unipolar: 1, 2, 2.5, 5, 10, 20 V DC; bipolar ± 1, ±2, ±5, ±10 V DC; 4 channels can be hardware-configured for 4–20 mA; 1 MΩ input impedance, up to 4,100 samples/s			
<b>Analog Outputs</b>	Two 12-bit res. channels, buffered, 0–10 V DC, ±10 V DC, and 4–20 mA, update rate 12 kHz			
<b>Serial Ports</b>	5 serial ports:	4 serial ports:	5 serial ports:	
	<ul style="list-style-type: none"> <li>1 RS-485</li> <li>2 RS-232 or 1 RS-232 (with CTS/RTS)</li> </ul>	<ul style="list-style-type: none"> <li>1 RS-485</li> <li>1 RS-232 (no CTS/RTS)</li> </ul>	<ul style="list-style-type: none"> <li>1 RS-485</li> <li>2 RS-232 or 1 RS-232 (with CTS/RTS)</li> </ul>	
<b>Serial Rate</b>	1 clocked serial port multiplexed to 2 RS-422 SPI master ports 1 serial port dedicated for programming/debug Max. asynchronous rate = 120 Kbps			
<b>Hardware Connectors</b>	<ul style="list-style-type: none"> <li>2 RabbitNet™ RJ-45 connectors</li> <li>7 polarized 2x5 Micro-Fit connectors, 3mm pitch</li> <li>1 polarized 2x7 Micro-Fit connector, 3mm pitch</li> <li>1 polarized 2x2 Micro-Fit connector, 3mm pitch</li> <li>1 polarized 2x3 Micro-Fit connector, 3mm pitch</li> <li>Programming port: 2 × 5 IDC, 1.27 mm pitch</li> </ul>			
<b>Network Connectors</b>	1 RJ-45 Ethernet		1 RP-SMA antenna	-
<b>Real-Time Clock</b>	Yes			
<b>Timers</b>	Ten 8-bit timers (6 cascadable, 3 reserved for internal peripherals), one 10-bit timer with 2 match registers			
<b>Watchdog/Supervisor</b>	Yes			
<b>Power</b>	9–36 V DC, 4.5 W max		9–36 V DC, 9 W max	9–36 V DC, 4.5 W max
<b>Operating Temperature</b>	-20° C to +85° C (-40° C to +85° C without the miniSD Card)		-30° C to +75° C	-40° C to +85° C
<b>Humidity</b>	5–95%, non-condensing			
<b>Board Size</b>	3.75" × 5.75" × 0.95" (96 mm × 146 mm × 24 mm)		3.75" × 5.75" × 0.66" (96 mm × 146 mm × 17 mm)	