



The BlueCore™ line of Bluetooth products from CSR integrate a microcontroller along with peripherals to match your application requirements. Variants are available with integrated ROM or flash, Multimedia versions with integrated DSP and stereo Codec, or Plug-n-Go™ with integrated balun, filter and matching. **BlueCore3:** CSR's complete v1.2 Bluetooth solution including eSRC (extended Synchronous Connections), which allows for retransmissions of dropped packets, allowing for a clearer, better sound out of your Bluetooth device. **BlueCore4:** CSR's EDR (Enhanced Data Rate) v2.0 Bluetooth solution, offers backwards compatibility with v1.1 and v1.2 Bluetooth devices. External Flash, ROM, Plug-n-Go and Headset versions are available to match your application. Offers up to 3 times the data rate as previous versions of Bluetooth with lower power consumption. **BlueCore5:** Series offers the latest generation technology, offering compatibility with the latest Bluetooth specification, v2.1. **BlueCore6:** Series provides the AurStream audio interface, which provides significant power saving over previous CVSD (Continuous Variable Slope Delta).

Integration Type	Flash (Mbits)	ROM (Mbits)	On-Chip Codec	Features/Operating Voltage	Package	Digi-Key Part No.	Cut Tape Price Each			T & Rf Pricing 2,000	CSR Part No.
							1	10	50		
BlueCore3											
ROM	—	4	No/PCM Interface	Dual UART Ports, Self Test/1.8V	42-CSP	BC313141A18-IXF-E4CT-ND	5.21	5.03	4.49	2322.87/M	BC313141A18-IXF-E4
Multimedia, External Flash	—	4	No/PCM Interface	USB, Self Test/1.8V, DSP Co-Processor,	84-VFBGA	BC313143A18-IRK-E4CT-ND	5.93	5.72	5.11	2659.53/M	BC313143A18-IRK-E4
Multimedia, Plug-n-Go	8	—	16-Bit Stereo Audio	Dual UART, Scatternet/1.8V	120-VFBGA	BC352239A-IVQ-E4CT-ND	12.50	12.07	10.78	—	BC352239A-IVQ-E4
Audio Flash	6	—	15-Bit Linear Audio	Dual UART, Scatternet, Regulator/1.8V	96-LFBGA	BC358239A-INN-E4CT-ND	23.24	22.44	20.04	14021.31/M	BC358239A-INN-E4
BlueCore4											
ROM	—	4	—	BT v2.1 + EDR, On-Chip Regulator, Wi-Fi Coexistence/1.8V	47-WLSCP	BC0401PC08-ICXB-RCT-ND	5.31	5.13	4.58	3209.38/M	BC0401PC08-ICXB-R
	—	4	No/PCM Interface	USB, UART, Scatternet, Regulator, Wi-Fi Coexistence/1.8V	47-CSP	BC41B143A06-IXB-E4CT-ND	5.04	4.87	4.35	3039.93/M	BC41B143A06-IXB-E4
	—	4	—	BT v2.1 + EDR, On-Chip Regulator, Wi-Fi Coexistence/1.8V	47-CSP	BC41B143A07-IXB-E4CT-ND NEW!	5.04	4.87	4.35	3039.93/M	BC41B143A07-IXB-E4
	—	4	—	BT v2.1 + EDR, On-Chip Regulator, Wi-Fi Coexistence/1.8V	84-BGA	BC41B143A07-IRK-E4CT-ND NEW!	5.62	5.43	4.85	3393.41/M	BC41B143A07-IRK-E4
ROM, Plug-n-Go	—	4	PCM Interface	Dual UART Ports/1.8V	96-LFBGA	BC41B143A06-ANN-E4CT-ND	12.50	12.07	10.78	7540.92/M	BC41B143A06-ANN-E4
Headset	—	6	15-Bit Linear Audio	USB and Dual UART Ports up to 3Mbits/1.8V	84-VFBGA	BC41B143A07-ANN-E4CT-ND	12.50	12.07	10.78	7540.92/M	BC41B143A07-ANN-E4
Audio ROM	—	6	15-Bit Linear Audio	UART, Regulator, Battery Charger/1.8V	96-TFBGA	BC413159A06-IPK-E4CT-ND	11.91	11.50	10.27	2945.67/M	BC413159A06-IPK-E4
Audio Flash	6	—	15-Bit Linear Audio	USB, UART, Regulator/1.8V	56-QFN	BC413159A11-IOA-E4CT-ND	4.88	4.72	4.21	2945.67/M	BC413159A11-IOA-E4
Audio ROM	6	—	15-Bit Linear Audio	UART, Regulator/1.8V	96-TFBGA	BC413159B10-IPK-E4CT-ND	7.23	6.98	6.23	—	BC413159B10-IPK-E4
Audio Flash	6	—	15-Bit Linear Audio	UART, LED Driver, Regulator, Battery Charger/1.8V	96-TFBGA	BC41C671A-IPK-E4CT-ND	10.71	10.34	9.23	6456.91/M	BC41C671A-IPK-E4
Multimedia, External Flash	8	—	13 - 16-Bit Linear Audio	Dual UART Ports, USB, Piconet, Scatternet, Regulator, Wi-Fi Coexistence/1.8V	96-TFBGA	BC417143B-GION-E4CT-ND NEW!	5.75	5.55	4.95	3464.11/M	BC417143B-GION-E4
	8	—	13 - 16-Bit Linear Audio	Dual UART Ports, USB, Piconet, Scatternet, Regulator, Wi-Fi Coexistence/1.8V	96-VFBGA	BC417143B-GIRN-E4CT-ND NEW!	5.75	5.55	4.95	3464.11/M	BC417143B-GIRN-E4
External Flash	—	—	No/PCM Interface	Dual UART Ports, USB, Scatternet, Regulator, Wi-Fi Coexistence/1.8V	96-VFBGA	BC417143B-IRN-E4CT-ND	5.89	5.69	5.08	2648.31/M	BC417143B-IRN-E4
Flash, Plug-n-Go	8	—	PCM Interface	Dual UART Ports/1.8V	96-LFBGA	BC419143B-ANN-E4CT-ND	21.48	20.74	18.52	12960.95/M	BC419143B-ANN-E4
BlueCore5											
Multimedia, External Flash	—	—	16-Bit Stereo Audio	USB, UART, Regulator, Battery Charger/1.5V	169-TFBGA	BC576687B-ITB-E4CT-ND	13.48	13.01	11.62	—	BC576687B-ITB-E4
	—	—	16-Bit Stereo Audio	USB, UART, Regulator, Battery Charger/1.5V	144-TFBGA	BC576687C-ATB-E4CT-ND NEW!	16.13	15.58	13.91	9732.50/M	BC576687C-ATB-E4
	—	—	16-Bit Stereo Audio	USB, I2C, UART, Regulator, Battery Charger/1.5V	169-TFBGA	BC576687C-GITB-E4CT-ND	12.61	12.18	10.88	7611.61/M	BC576687C-GITB-E4
Multimedia Flash	8	—	16-Bit Stereo Audio	DSP Co-Processor, v2.1 + EDR, Dual UART ports up to 4Mbps and USB, I2C	120-LFBGA	BC576687C-ITM-E4CT-ND	17.57	16.97	15.15	10604.41/M	BC576687C-ITM-E4
	16	—	16-Bit Stereo Audio	DSP Co-Processor, v2.1 + EDR, Dual UART ports up to 4Mbps and USB, I2C	105-LFBGA	BC576687C-INN-E4CT-ND	21.67	20.93	18.69	13078.78/M	BC576687C-INN-E4
	16	—	16-Bit Stereo Audio	DSP Co-Processor, v2.1 + EDR, Dual UART ports up to 4Mbps and USB, I2C	120-LFBGA	BC576687C-GITM-E4CT-ND NEW!	22.57	21.80	19.46	13620.78/M	BC576687C-GITM-E4
Multimedia Flash, Plug-n-Go	16	—	—	Bluetooth v2.1+EDR, Class 2 & 3	105-LFBGA	BC576687C-ANN-E4CT-ND NEW!	26.79	25.87	23.10	16165.84/M	BC576687C-ANN-E4
ROM HCI, FM	—	6	No/PCM Interface	FM Radio, v2.1 + EDR, Dual UART up to 4Mbps	84-VFBGA	BC51E129B14-IRK-E4CT-ND	7.42	7.17	6.40	3321.61/M	BC51E129B14-IRK-E4
	—	6	No/PCM Interface	FM Radio, v2.1 + EDR, Dual UART up to 4Mbps	67-WLSCP	BC51E129B14-IYH-E4CT-ND	6.64	6.41	5.73	2973.73/M	BC51E129B14-IYH-E4
Multimedia ROM	—	8	16-Bit Stereo Audio	DSP Co-Processor, v2.1 + EDR, Dual UART ports up to 4Mbps	68-QFN	BC576687A04-IOF-E4CT-ND	10.55	10.18	9.09	6362.65/M	BC576687A04-IOF-E4
	—	8	16-Bit Stereo Audio	A2DP1.2 and AVRCP1.0 enabled with SBC encoder, DSP/1.5V and 1.8V	68-QFN	BC576687A05-IOF-E4CT-ND	11.17	10.79	9.63	6739.70/M	BC576687A05-IOF-E4
	—	—	16-Bit Stereo Audio	UART, BT Radio, DSP, Battery Charger/1.8V	68-QFN	BC576687A07-IOF-E4CT-ND NEW!	9.49	9.17	8.19	5726.38/M	BC576687A07-IOF-E4
BlueCore6											
Headset	—	—	15-Bit Mono	UART, Regulator, Battery Charger/1.8V	56-QFN	BC6110A14-IOQA-RCT-ND NEW!	4.30	4.15	3.71	2592.19/M	BC6110A14-IOQA-R
	—	—	16-Bit Mono	UART, Regulator, Battery Charger/1.5V	48-QFN	BC6130A04-IOQB-RCT-ND NEW!	5.27	5.09	4.55	3181.33/M	BC6130A04-IOQB-R
	—	—	16-Bit Mono	UART, Regulator, Battery Charger/1.5V	48-QFN	BC6140A02-IOQB-RCT-ND NEW!	7.02	6.79	6.06	4241.77/M	BC6140A02-IOQB-R
ROM	—	6	AurStream 16-Bit	v2.1 + EDR, Piconet, Scatternet, UART port to 4Mbaud, Regulator/1.5V and 1.8V	40-QFN	BC63B239A04-IOD-E4CT-ND	5.46	5.28	4.72	3299.15/M	BC63B239A04-IOD-E4
	—	6	Integrated CSR AurStream	v2.1 + EDR, Piconet, Scatternet, UART to 4Mbaud, Regulator/1.5V and 1.8V	40-QFN	BC63B239A04-AQK-E4CT-ND NEW!	7.50	7.24	6.47	4524.55/M	BC63B239A04-AQK-E4
	—	4	PCM Interface/AurStream 16-Bit	SDIO/CSPI/UART Interface up to 4Mbaud	51-WLSCP	BC63B239A04-IUE-E4CT-ND	4.88	4.72	4.21	2945.67/M	BC63B239A04-IUE-E4
Audio ROM	—	6	AurStream 16-Bit	Internal Regulator, Battery Charger, External Codec Support	48-QFN	BC63C159A03-IOB-E4CT-ND	4.69	4.53	4.04	2827.85/M	BC63C159A03-IOB-E4
	—	6	AurStream 16-Bit	Internal Regulator, Battery Charger, External Codec Support	64-BGA	BC63C159A03-GIVA-E4CT-ND	6.52	6.30	5.63	3935.42/M	BC63C159A03-GIVA-E4

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† For Tape and Reel part number, change CT-ND to TR-ND.

Bluetooth® Application Development Kits and Reference Design Kits

CSR Bluetooth Development Kits and Reference Design Kits provide hardware to evaluate many different application possibilities and give you the opportunity to develop with different BlueCore™ devices. SYS Kits provide components with Bluetooth application profile(s) along with CD with PSKEY editing software.

Description	Digi-Key Part No.	Price Each
BlueTunes1 Development Kit for Wireless Stereo Audio, BlueCore3 Multimedia	BTN-001A-ND	561.08
BlueTunes1 Development Kit for Headset/Speaker	BTN-001B-ND	561.08
BlueTunes ROM Stereo Headset Solution Development Kit	BTN-003-1A-ND	561.08
BC5-MM Development Board only, BlueTunes2	DEV-SYS-1645B3-1A-ND	448.86
BlueVox Development Board, Wireless Audio (Mono)	BV-001-3A-ND	561.08
BlueVox Development Board Wireless Audio (Mono), for BlueVox QFN	BV-001-4A-ND	561.08
BlueVox DSP Development Kit	BV-003-1A-ND	561.08
USB Dongle Bluetooth EDR Reference Design, Nanosira, BlueCore4 External	DEV-SYS-1487-1B-ND	112.22
UART and SPI Level Shifter Interface Board for UniFi or BlueCore	DEV-SYS-1504-1A-ND	336.65
RoadRunner Plug-n-Talk Reference Design Hardware, vehicle plug in for hands-free evaluation	DEV-RR-001-1A-ND	1122.16
RoadRunner Plug-n-Talk Software Development Kit	DEV-RR-SDK-01A-ND	1122.16
BlueVox DSP Example Design Board	DEV-PC-0119-1C-ND	112.22
BlueVox2 Example Design Board	DEV-PC-0123-1C-ND	105.20
UART and SPI Interface Board for BlueCore, Board Only	DEV-PC-1309C-ND	105.20
BlueVox DSP Development Board	DEV-PC-1833-4A-ND	224.43
BlueVox2 Development Board	DEV-PC-1888-3A-ND	210.41
UART and SPI Interface Board with Cables for BlueCore	DEV-SYS-1309-1C-ND	105.20
BluePlayer MP3 Development Kit	DEV-MP3-1A-ND	1402.70
RadioPro Development Kit, Wireless Internet Radio	DEV-SYS-RADIOPRO-1A-ND	3360.87
USB to SPI Interface Converter	DEV-SYS-1808-1A-ND	237.06
Reference Design Kit, BC4-ROM A07 Module	DEV-SYS-1519-1B-ND	280.54

Description	Digi-Key Part No.	Price Each
BC5-FM Development Kit	DEV-SYS-0101-1B-ND	280.54
BC6-ROM Development Kit	DEV-SYS-0114-1A-ND	280.54
BC6-ROM QFN Development Kit	DEV-SYS-0115-1A-ND	280.54
BC5-MM Dual Microphone Headset Development Kit	DEV-SYS-MONOH5-1A//ND	561.08
TrueTest Development Kit	DEV-SYS-1455-2A-ND	1346.59
BC6110 Bluetooth Headset Development Kit	DK-BC-6110-1A-ND NEW!	561.08
BC6130 Bluetooth Headset Development Kit	DK-BC-6130-1A-ND NEW!	561.08
BC6150 Bluetooth Headset Development Kit	DK-BC-6150-1A-ND NEW!	561.08

◆ RoHS Compliant

Bluetooth® Development Tools Casira™

The Casira Development Kit allows for the development and testing of your Bluetooth design. This kit includes: 2 Casira development pods (each pod includes a BlueCore™ based module), power supplies and cords, programming and RS232 cables, 2 headsets and a CD containing documentation and BlueSuite software. BlueSuite includes drivers to communicate with the BlueCore devices at the HCI and RFCOMM layers and programs such as BlueChat for establishing a data or voice link and BlueTest, which can be used to put the BlueCore device into test modes for radio development and qualification. BlueSuite also provides a Flash ROM loader and Device Firmware upgrade Wizard.

Description	Digi-Key Part No.	Price Each
Bluetooth Development Kit	BCES01-ND	3366.48
Casira End Point (Development Pod)	BCES01-EP-ND	836.47
Antenna for Casira Module	ANT001-ND	20.49
Connector Kit (as fitted to Casira Motherboard)	CK001-ND	27.61
Parallel-RJ45 + Cable (XSP1 + SPI Cable)	CK003-ND	29.46
Module (2) for Casira Development Kit	STK-417143B-1B-ND	280.54

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Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

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