Miniature in size, giant in capabilities

The CR8200 is the next generation of Code's patented, high performance, miniature barcode imaging engine. Innovative in its design, size and decode capability, the CR8200 delivers best-in-class high performance 2D imaging that can be added to the smallest of devices. With rapid, first-pass read rates the CR8200 effortlessly decodes 1D, 2D, postal and direct part mark barcodes printed on a variety of surfaces in a variety of conditions.

For integration versatility, choose the compact form factor that works best for your product design - imager with integrated decode board, or imager with software decoder that can be integrated into your existing processing platform.

Ultra-efficient OEM integration

The CR8200 draws significantly less current and transitions in and out of its low power state faster than any other imager-based scan engine. These two factors are critical when integrating the engine into OEM devices. Enhanced power management from the imager facilitates longer battery life for mobile devices and lowers overall operational costs. Code provides an easy-to-use SDK and comprehensive Integration Guide to help speed customer design efforts. The CR8200 is also backed by a world-class support team with years of barcode system design experience.

With flexible integration options and unmatched decoding capabilities, the CR8200 makes a powerful addition to your operation.

Features & Benefits

- Ultra fast microprocessor with world-class decoding platform
- Bright LED aiming mechanism
- Imager Only or Imager with Decode Options
- Extremely low power consumption for efficiency in battery applications
- Fast boot to start reading right away
- Compact size fits any application
- Simple to setup and configure
- Built in TTL RS232 or USB interface

CR821x without mounting tabs

Applications

Medical Devices, ATMs, Price-Lookup, Lottery, Age Verification, Direct Part Marking, Handheld Devices, Mobile Computers, and more

Features at a Glance

IMAGER · 1D · 2D · PDF · POSTAL · CortexRM™

JAVASCRIPT · USB · RS232 · BLUETOOTH · MEMORY · SCREEN & KEYPAD

Physical Characteristics

Imager Only Dimensions	**Without Tabs:** 0.81" W x 0.53" D x 0.47" H (20.50 mm W x 13.39 mm D x 11.90 mm H) **With Tabs:** 1.24" W x 0.53" D x 0.47" H (31.60 mm W x 13.39 mm D x 11.90 mm H)
Imager With Decode Board Dimensions	**CR821x without Tabs:** 0.90" W x 1.08" D x 0.50" H (22.80 mm W x 27.53 mm D x 12.70 mm H) **CR821x with Tabs:** 1.24" W x 1.08" D x 0.50" H (31.60 mm W x 27.53 mm D x 12.70 mm H) **CR822x without Tabs:** 0.81" W x 0.65" D x 0.47" H (20.50 mm W x 16.46 mm D x 11.90 mm H) **CR822x with Tabs:** 1.24" W x 0.65" D x 0.47" H (31.60 mm W x 16.46 mm D x 11.90 mm H)
Imager Only Weight	0.10 oz (3.0 g)
Imager with Decode Board Weight	0.17 oz (5.0 g)

User Environment

Operating Temperature	-20° to 55° C / -4° to 131° F
Storage Temperature	-30° to 65° C / -22° to 149° F
Humidity	5% to 95% non-condensing
Decode Capability	**1D:** BC412, Codabar, Code 11, Code 32, Code 39, Code 93, Code 128, IATA 2 of 5, Interleaved 2 of 5, GS1 DataBar, Hong Kong 2 of 5, Matrix 2 of 5, MSI Plessey, NEC 2 of 5, Pharmacode, Plessey, Straight 2 of 5, Telepen, Trioptic, UPC/EAN/JAN
	Stacked 1D: Codablock F, Code 49, GS1 Composite (CC-A/CC-B/CC-C), MicroPDF, PDF417
	2D: Aztec Code, Data Matrix, Han Xin, Micro QR Code, QR Code
	Postal Codes: Australian Post, Canada Post, Intelligent Mail, Japan Post, KIX Code, Korea Post, Planet, Postnet, UK Royal Mail, UPU ID-tags
	Proprietary 2D: GoCode® (Additional License Required)
Image Output Options	JPEG, PGM

Working Ranges

CR8200 Performance		
Test Barcode	**Min Inches (mm)**	**Max Inches (mm)**
7.5 mil Code 39	2.0" (50 mm)	9.6" (245 mm)
10.5 mil GS1 Databar	1.4" (35 mm)	8.9" (225 mm)
13 mil UPC	1.6" (40 mm)	14.6" (370 mm)
5.8 mil PDF417	3.3" (85 mm)	6.1" (155 mm)
6.7 mil PDF417	2.6" (65 mm)	6.9" (175 mm)
5 mil DM	3.0" (75 mm)	3.5" (90 mm)
6.3 mil DM	2.8" (70 mm)	5.3" (135 mm)
10 mil DM	2.0" (50 mm)	8.1" (205 mm)
20.8 mil DM	1.2" (30 mm)	16.7" (425 mm)

Note: All samples were high quality barcodes and were read along a physical center line at a 10° angle. Default AGC settings were used. Accuracy = +/- 10%.

Performance Characteristics

Field of View	51° horizontal by 39.4° vertical
Focal Distance	Approximately 130 mm
Sensor	CMOS 1.2 Megapixel monochrome
Optical Resolution	1280 x 960
Pitch	± 65° (from front to back)
Skew	± 60° (side-to-side)
Rotational Tolerance	± 180°
Symbol Contrast	15% minimum reflectance difference
Target Beam	Single, blue targeting bar, 470nm LED
Ambient Light Immunity	Sunlight: Up to 9,000ft-candles/96,890 lux
Power Requirements	**CR8212:** 3.3V to 5.0V **CR8222:** 3.3V **CR82x1:** 5.0V **Reader @ 5vdc (mA):** Maximum = 300mA; Idle = 1 mA; Sleep = 0.5 mA
Memory Capacity	1MB NOR Flash, 16MB RAM
Communication Interfaces	Parallel Camera Interface , RS232, USB 2.0 (Generic HID, HID Keyboard, Virtual COM Port)
Warranty	www.codecorp.com/warranty

Accessories

- Available Ribbon Cables: 2.0" (50 mm), 6.0" (150 mm) and 12.0" (300 mm)
- Custom Mounting Brackets available upon request

CE FC RoHS

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