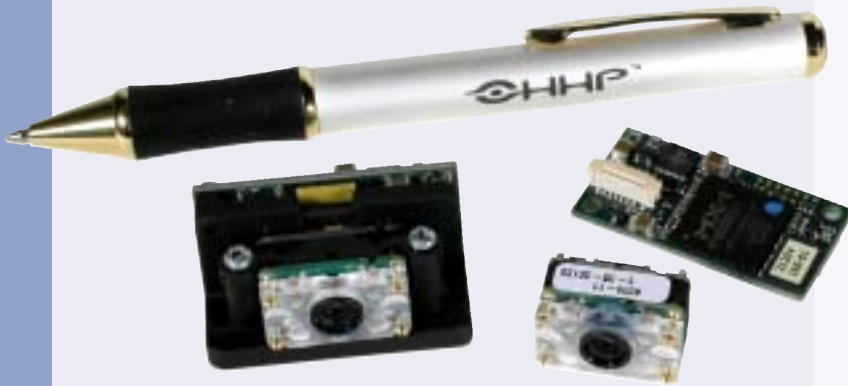




IMAGETEAM™ 4010/80 OEM Miniature Image Engine



The HHP IMAGETEAM™ (IT) 4010/80 Image Engine is designed for integration into hand held portable data terminals (PDTs), along with other OEM devices. The IT4010/80 combines the latest in CMOS image sensor technology, illumination, and optics to create a compact, lightweight, integrable scan engine capable of reading 1D linear codes, 2D stacked/matrix codes, OCR fonts, postal codes, and digital image capture.

The IT4010/80 builds on HHP's legacy of reading the most comprehensive list of symbologies by adding valued features enabled by digital imaging. The IT4010/80 delivers full omni-directional (360°) scanning with two optical configurations and a drop-in mechanical design. This allows OEMs and third-party manufacturers to integrate the benefits of image-based scanning into a variety of devices, including hand-held computers, medical instrumentation, diagnostic equipment, lottery terminals, vending machines, and robotics.

Designed for ease-of-integration and superior durability, the IT4010/80 is ideal as a drop-in module to most AIDC applications. The size and current draw of the device allow the engine to be integrated with no mechanical modifications. Incorporating sensor technology with no moving parts, the IT4010/80 is built to withstand 2,500G of shock. With an LED-based aiming and illumination system, the IT4010/80 eliminates the need for inconvenient "laser warning" documents and labels. The decoder module supports a pseudo-standard RS-232 interface that, in most cases, does not require any hardware modifications to existing platforms. To ease integration efforts, a Software Developers Kit provides a simple software interface (APIs).

Two different decoding capabilities provide OEMs the flexibility required to address various application-specific needs. The IT4010, with linear and PDF417 decoding, delivers "laser-like" reading on linear codes and point-and-shoot on stacked codes. The IT4010 provides OEMs with a competitive edge when compared to linear scanners that require a sweeping motion to read stacked codes. The IT4080 full-featured decoder incorporates HHP's comprehensive list of decoding capabilities. This flexibility enables integrators to serve today's applications and protect their investment for future needs.

To learn how the IT4010/80 can work for you, contact us at any of the locations listed on the back or visit us at www.hhp.com.

Features

Small, Lightweight Form Factor - Designed for ease-of-integration, the IT4010/80 provides the ideal multi-functional device for mobile products and integrated kiosk solutions.

Durable - Incorporating sensor technology with no moving parts, the IT4010/80 is built to withstand 2,500G of shock.

Aiming - Two color aiming/illumination LEDs provides ease-of-use in scanning applications.

Point-and-Shoot Scanning - The IT4010/80 image-based reader enables full omni-directional reading of all bar codes; no swiping is required.

Decoding - Autodiscriminates between supported symbologies and fonts. Reads all major linear, stacked linear, and matrix bar codes as well as machine-readable fonts used in Optical Character Recognition (OCR).

Upgrade your image.



IMAGETEAM™ 4010/80 Specifications

Performance

IT4010/80SR Focal Point:	7 inches (17.8cm) from lens plate (nominal)					
IT4010/80SF Focal Point:	4.5 inches (11.4cm) from lens plate (nominal)					
IT4010/80SR Working Range	8 mil Linear (.020cm)	10 mil PDF417 (.025cm)	13 mil UPC (.033cm)	15 mil PDF417 (.038cm)	15 mil Data Matrix (.038cm)	35 mil MaxiCode (.089cm)
Near:	3.5 in. (8.9cm)	3.1 in. (7.9cm)	2.5 in. (6.4cm)	3.5 in. (8.9cm)	3.7 in. (9.4cm)	2.0 in. (5.1cm)
Far:	7.6 in. (19.3cm)	9.0 in. (22.9cm)	12.5 in. (31.8cm)	11.2 in. (28.4cm)	6.5 in. (16.5cm)	13 in. (33cm)
IT4010/80SF Working Range	6.6 mil PDF417 (.017cm)	7.5 mil Linear (.019cm)	10 mil Linear (.025cm)	13 mil UPC (.033cm)	10 mil PDF417 (.025cm)	15 mil Data Matrix (.038cm)
Near:	2.8 in. (7.1cm)	2.5 in. (6.4cm)	2.2 in. (5.6cm)	2.3 in. (5.8cm)	2.2 in. (5.6cm)	2.3 in. (5.8cm)
Far:	6.0 in. (15.2cm)	6.5 in. (16.5cm)	7.6 in. (19.3cm)	8.9 in. (22.6cm)	7.6 in. (19.3cm)	6.0 in. (15.2cm)
Rotational Sensitivity:	360°					
Viewing Angle:	±40°					
Ambient Light:	535 to 100,000 lux (full sunlight)					
Aiming						
Illumination LEDs:	626nm ±30nm					
Green Aiming LEDs:	526nm ±30nm					
Red Aiming LEDs:	626nm ±30nm					

Symbologies

2 Dimensional:	PDF417, MicroPDF417, MaxiCode, Data Matrix, QR Code, Aztec, Aztec Mesas, Code 49, EAN•UCC Composite, Snowflake*, Dataglyphs*
Linear:	Code 39, Code 128, Codabar, UPC, EAN, Interleaved 2 of 5, Reduced Space Symbology, Code 93, Codablock F, BC412* *available to licensed users
Postal:	Postnet, Planet Code, British Post, Canadian Post, Japanese Post, KIX (Netherlands) Post
OCR Fonts:	OCR-A and OCR-B
Interface:	TTL RS-232, USB 1.0, and HHLC (Code 128 Emulation)

Mechanical Specifications

	Image Module	DSP Board	Bracketed Device
Depth:	.584 in (14.83mm)	1.51 in (38.35mm)	.982 in (24.9mm)
Width:	.830 in (21.08mm)	.86 in (22.8mm)	1.51 in (38.35mm)
Height:	.47 in (11.94mm)	.357 in (9.07mm)	.87 in (22.1mm)
Weight:			1 ounce (28.3 grams)

Electrical Specifications

Operational Input Voltage:	3.3 VDC ±5% (23°C)
Current Draw	
Operating:	340 mA @ 3.3 VDC
Standby:	50 mA @ 3.3 VDC
Power Down:	500 µA @ 3.3 VDC

Environmental Specifications

Temperature Ranges	
Operating:	-10° to +50° C (14° to 122° F)
Storage:	-40° to +70° C (-40° to 158° F)
Humidity:	5% to 95% RH, non-condensing at +32°C
Shock:	2500 G
Vibration:	10G over a frequency range of 5Hz to 500Hz and 1G over a frequency range of 500 Hz to 2,000 Hz

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