MicroHAWK Engine

Ultra-Compact
Height: 0.77" (19.5 mm)
Width: 1.13" (28.7 mm)
Length: 1.33" (33.9 mm)

WebLink Interface On Board

Integrated LEDs

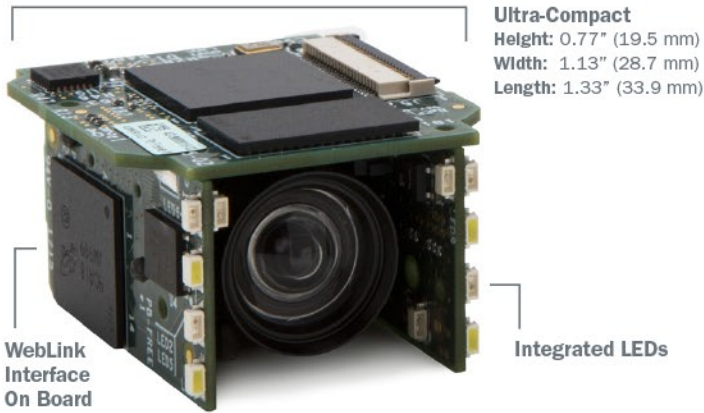## Modular OEM Barcode Imaging Engine

MicroHAWK offers OEMs and machine builders the industry's smallest, most powerful, modular, and scalable auto ID platform available for solving the toughest 1D/2D barcode reading challenges.

The design of the MicroHAWK Engine builds upon Microscan's 30+ years of experience working with the world's largest OEMs. MicroHAWK offers practically limitless combinations of optics, sensors, decoders, and processing performance to meet any OEM barcode reading requirement. Extremely small, powerful, and simple – MicroHAWK is the ideal solution for your embedded application.

AT A GLANCE

- *Ultra-compact (19.5 mm x 28.7 mm x 33.9 mm)*
- *USB 2.0 High Speed communication*
- *X-Mode advanced decoding algorithms*
- *Integrated targeting and read/pass indicators*
- *Red and white high-output LED illumination*

WebLink Interface: Browser-based configuration tool enables quick and easy reader setup, with no need to install software or access host files.

For more information on this product, visit **www.microscan.com.**

AVAILABLE SYMBOLOGIES

Linear	All Standard	Postal Codes	

Stacked	Micro PDF417	PDF417	GS1 Databar

2D	Data Matrix	QR Code	Micro QR Code	Aztec

Ultra-Compact
Measuring just 19.5 mm x 28.7 mm x 33.9 mm and weighing less than 14 g, the MicroHAWK Engine is intended for use in robotic equipment and for mounting in the smallest spaces.

Extremely Powerful
Built around an ultra-fast microprocessor, MicroHAWK easily solves application challenges ranging from simple barcode reading to direct part mark (DPM) applications.

No Software Required
The streamlined WebLink product setup tool requires no software installation and features an intuitive interface for novice users.
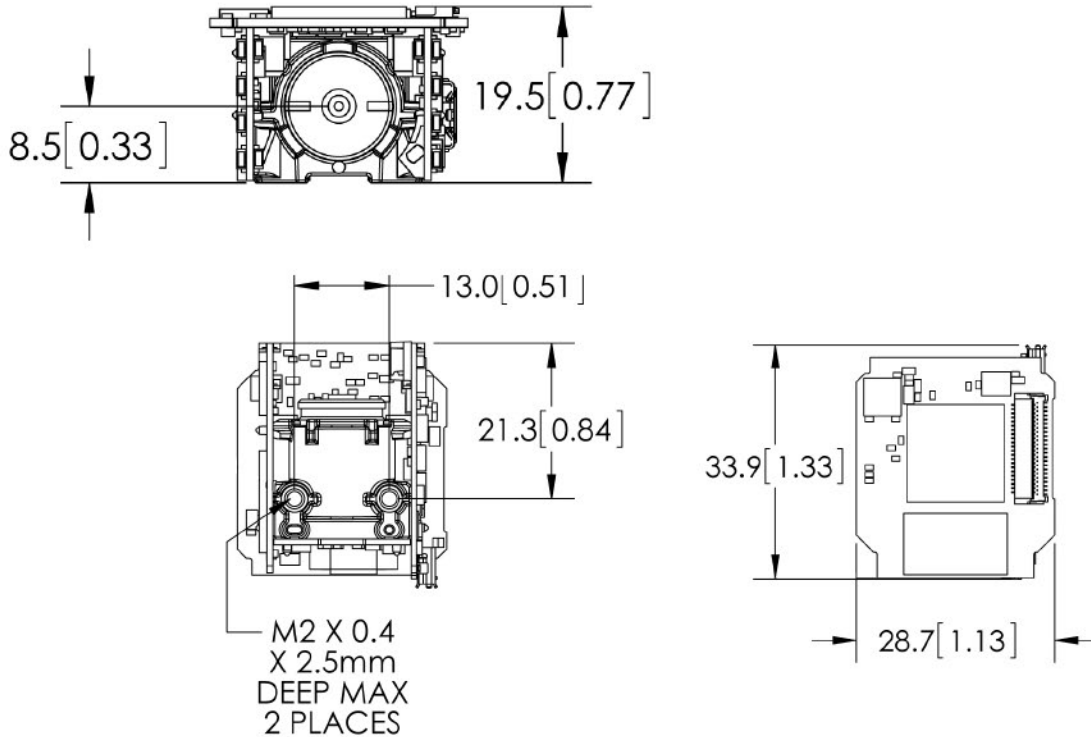
Reliability and Longevity
MicroHAWK delivers both reliability and high performance with the assurance of long-term availability and support. Microscan has served the OEM/Embedded market for over 30 years and we have a sophisticated understanding of the service and support required for the lifecycle of your machine.

Application Examples
- Life sciences and clinical instrumentation
- Laboratory automation and dispensing
- Electronics assembly and test
- Kiosk and ticketing
- Document handling
- Print and labeling

MICROSCAN®

ENGINE DIMENSIONS

8.5 [0.33]

19.5 [0.77]

13.0 [0.51]

21.3 [0.84]

M2 X 0.4
X 2.5mm
DEEP MAX
2 PLACES

33.9 [1.33]

28.7 [1.13]

Note: Millimeters [Inches]. Nominal dimensions shown. Typical tolerances apply.

MECHANICAL
Height: 19.5 mm (0.77")
Width: 28.7 mm (1.13")
Length: 33.9 mm (1.33")
Weight: 14 g (0.49 oz.)

ENVIRONMENTAL
Operating Temperature: 0° to 40° C
(32° to 104° F)
Humidity: 5% to 95% (non-condensing)

SENSOR OPTIONS
Progressive scan, square pixel.
Shutter: Software adjustable 10 µs to 16.7 ms
Shutter Type: Global (WVGA, SXGA), Rolling
(QSXGA)
Sensor: 1/3 inch
WVGA: CMOS 752 x 480 pixels
SXGA: CMOS 1280 x 960 pixels
QSXGA (Color): CMOS 2592 x 1944 pixels

IMAGING RATES
WVGA: Up to 60 full frames per second
SXGA: Up to 42 full frames per second
QSXGA: Up to 5 full frames per second

COMMUNICATION PROTOCOLS
Interface: USB 2.0 High Speed

CONNECTOR
Type: Micro-USB Type B socket
Second USB port on ZIF connector
(Refer to the *MicroHAWK Engine Integration
Guide* for ZIF connector pin assignments.)

SYMBOLOGIES
2D Symbologies: Data Matrix (ECC 0-200),
QR Code, Micro QR Code, Aztec Code
Stacked Symbologies: PDF417, Micro-
PDF417, GS1 Databar (Composite and
Stacked)
Linear Barcodes: Code 39, Code 128,
BC412, Interleaved 2 of 5, UPC/EAN,
Codabar, Code 93, Pharmacode, PLANET,
POSTNET, Japanese Post, Australian Post,
Royal Mail, Intelligent Mail, KIX

LIGHT SOURCE
Type: High-output LEDs: 4 Red (625nm),
4 White, 2 Blue (Target Pattern), 2 Green
(Green Flash on Good Read)

INDICATORS
LEDs: Power
Blue V: Target Pattern
Green Flash: Good Read/Pass

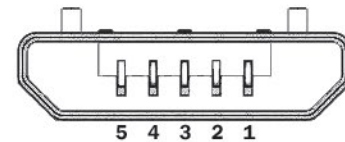## ELECTRICAL
Power: 5VDC ± 5%; 350mA at 5VDC (typ.)

MEMORY
2GB non-volatile FLASH, 256MB RAM

CE STANDARDS
Emissions: EN 55022:2010 Class A Limits

PIN ASSIGNMENTS
Micro-USB Type B Socket

5 4 3 2 1

No.	Function
1	Vbus (5V)
2	D–
3	D+
4	NC
5	Ground