ED40

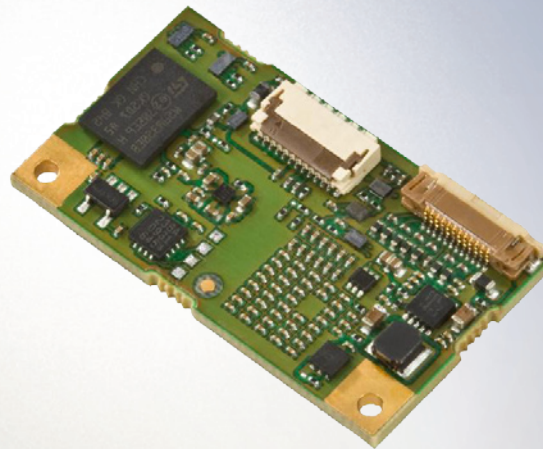## 2D DECODE BOARD
High Performance
USB 2.0

- **USB 2.0 interface – Provides high speed data transfer, including video and image applications**

- **The industry smallest USB decode board – saves room and fits the tightest mechanical constraints**

- **Latest micro-processor generation – maximizes scanning performances**

- **Patented high performing Intermec decoding software – avoids the exception process**

- **Compatible with all Intermec 2D imager optics – maximizes and leverages your electronic design on the long term**

- **Low power consumption modes – optimizes battery autonomy**

- **Plug compatible with the ED30 decode board – provides easy and cost effective upgrade**

The Intermec ED40 decode board provides High Speed USB 2.0 interface, allowing faster barcode data transmission and beyond (high speed video and image transfers), to increase your customers satisfaction and benefits. Powered by Intermec patented decoding and leading edge hardware, ED40 offers exceptional scanning performances on 1D and 2D barcodes (25% decoding speed improvements vs. standard decode board), and is ideal for scan intensive applications where productivity is key.

ED40 is the smallest USB board available in the market (34 mm W x 19 mm D x 5.6mm H), matching very tight design constraints. You can choose the hardware configuration that best suits your design, as the ED40 can be separated from the optics or bracket mounted to the optics. For an even more compact version, Intermec offers a reference design option (contact your Intermec OEM sale representative or local partner for more information).

ED40 is compatible with the complete Intermec 2D Imager range, so that developers can leverage their design efforts. It uses the same Intermec Scanner Control Protocol, the same configuration tools (EasySet) and same pin out developed for all Intermec engines. It is

also plug compatible with the Intermec ED30 standard decode board, so that you can reduce time to market and promote easier product migration.

By choosing the ED40, you also increase your market breadth by being able to offer the industry's widest 2D imager range, from arm reach scanning (EA11), extended range (EA20X) and Megapixel document imaging (EA21).

Intermec designed the ED40 to reduce power consumption to the minimum: A wide range of power saving modes is offered to you, so that you can adjust to your requirements.

As part of the Intermec OEM family, ED40 is designed to work in the most hostile environments. It operates a large temperature range and complies with the most stringent standards for shock and vibration.

By choosing Intermec, you are choosing to work with the industry's imaging market leader: With more than 40 years of experience, Intermec offers the widest range of 2D Imagers and maintains a dedicated in house engineering team specialized in imaging and decoding, securing your partnership for the long term.

Intermec®

Physical Characteristics
Decode board: 34 mm W x 19 mm D x 5.6 mm H
(1.34 in W x .75 in D x .22 in)
Note: ED40 can be separated from the optics or
bracket mounted to the Optics. Refer to the ED40
Integration Guide for detailed information
Weight: 6g (0.21oz.)

Symbologies
1D symbologies: EAN/UPC, GS1 Databar (limited
expanded & omni-directional), RSS, Code 39, Code
128, UCC/EAN 128, ISBN, ISBT, Interleaved/Matrix/
Industrial and Standard 2 of 5, Codabar, Code 93/93i,
Code 11, MSI, Plessey, Telepen, postal codes (A USPS
Intelligent Mail, Australian Post, BPO, Canada Post,
Dutch Post, Japan Post, PostNet, Sweden Post)
2D symbologies: Data Matrix, PDF417, Micro PDF 417,
Codablock Maxicode, QR, Aztec GS1 composite codes

Interfaces*
High speed USB 2.0 & RS232 TTL with
Intermec Scanner Control Protocol (ISCP)

Connection
Host connector: 12 pin ZIF connector,
pitch 0.5 mm (0.2 in)

Electrical Characteristics
ED40 alone, typical value:
Operating voltage: 3V to 5.5V
Operating current: depends on the 2D imager optics
Please refer to the ED40 Integration
Guide for detailed information.

Power saving mode: 2mA (EA20X, EA21)
& 4mA (EA11) with fast start up
Stand-by mode: <10uA

Environmental Characteristics
Operating temperature: -20° to 60° C (-4° to 122° F)
(except in continuous operation)
Operating Relative Humidity: 95% Rh @ 45°C (113°F)
Non-condensing, 4 days
Storage temperature: -30° to 70°C (-22° to 158°F)
Storage Relative humidity: 95% Rh @ 60°C (140°F)
Non-condensing, 4 days.
Shock: 2000G, 0.7ms, half sinus, 3 axes
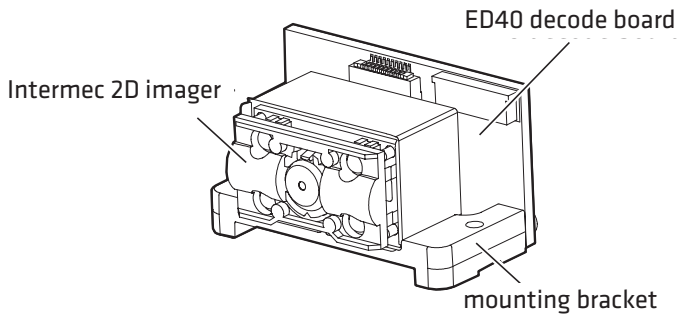**Vibration:** 8G r.m.s., from 10Hz to 500Hz,
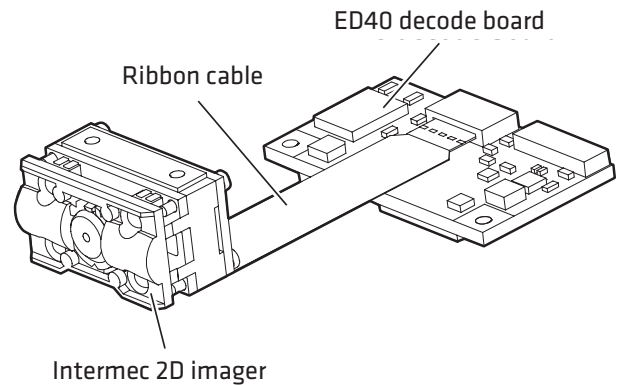2 hours/axis, 3 axes

Regulatory Approvals
UL, cUL, EN 60950 VDE, FCC Class A & B, RoHS, WEEE

ED40 Mounting Schemes

Mounted

Intermec 2D imager

ED40 decode board

mounting bracket

Unmounted

ED40 decode board

Ribbon cable

Intermec 2D imager

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