Mini DB
Ultra Compact, Miniature Decoder Board

Mini DB is a next generation, miniature sized decoder board introduced by Honeywell. A design that results in a 60 percent footprint reduction compared to previous generation decoders, Mini DB saves on space without sacrificing Honeywell’s renowned decoding capability.

Mini DB is dedicated for use with Honeywell’s latest flagship scan engines: N660X Series Slim Imager, which includes N6600 (LED aimer) and N6603 (laser aimer). When Mini DB is combined with a slim scan engine, customers can easily embed a complete 2D imaging solution in an exceptionally small space—offering greater design flexibility and integration than ever before.

Now, high performance 2D imaging can be added to even the smallest of devices: miniature handheld scanners, sleek consumerized smartphones and even wearable devices.

Mini DB supports the N660X’s parallel interface (30-pin). For the host interface, we creatively combined three types of host connections:

- **Board to Board (B2B):** Allows a snap-on installation to the main board with additional hold-down screws. The benefit of this “cable-less” solution is to eliminate an additional flex cable and connector while providing a more compact footprint.

- **Flex Cable (12-pin):** For designs where the host connection needs to mount the decode board separate from the host board.

**FEATURES & BENEFITS**

With a miniature form factor, Mini DB is 60% smaller than previous-generation decoder boards.

Honeywell’s advanced Adapts® imaging technology lends full symbology support, outstanding motion tolerance, mobile phone reading, and damaged barcode reading.

Support multiple interfaces, including both B2B (board to board) and flex cable connections with RS232 and USB options.

Optimized for use with Honeywell’s flagship N660X Series SlimImager.

TotalFreedom support offers an open-system architecture for developing software plug-ins to implement value-added custom features such as Honeywell’s EasyDL™.
Mini DB Technical Specifications

DIMENSIONS
Length: 20 ± 0.25 mm
Width: 14 ± 0.25 mm
Height: 4.8mm

ELECTRICAL SPECIFICATIONS
Input Voltage: 3.25V to 3.5V

INTERFACE
Input: 30-pin connector for scan engine parallel interface
Output: Board to board connector with RS TTL and USB HS (480 Mbit/s) available simultaneously

WORKING CURRENT
Operating current (Mini DB + N6603/N6600): RS mode: 330mA @ 3.3V USB Full Speed: 345mA @ 3.3V USB Hig Speed: 350mA @ 3.3V

IDLE CURRENT
Idle current @ 3.3V (imager powered): RS mode: 100mA Full Speed mode: 115mA High Speed mode: 125mA
Idle current @ 3.3V (imager not powered): RS mode: 65mA Full Speed mode: 78mA High Speed mode: 88mA
Standby/Suspend @ 3.3V:
RS mode: 2.5mA Full Speed mode: 3mA High Speed mode: 3.2mA

WORKING MODE
Will support all the power modes of Gen6 decoder (N568x).
- Operation (scanning/decoding)
- Idle
- Standby (RS) / Suspend (USB)
- Power Off

INDICATORS
BEEPER and GREEN_LED signals available on the output connector.

ENGINE SUPPORTED
N560X
N660X (Parallel only)

SOFTWARE
ESS, OCR, EasyDL™ and TotalFreedom® Supported

ENVIRONMENTAL
Operating temperature: -25°C to +50°C
Storage temperature: -40°C to +70°C
Humidity: 95% RH @ 45°C (113°F)
Shock: 18 shock @ 2000G for 0.7ms (similar to Gen6 decoder board)

COMPLIANCE & REGULATORY REQUIREMENTS
EMC Class B, FCC class B

SAFETY
CB Scheme: IEC 60950-1 Second Edition
UL/C-UL (Recognized component)
UL 60950-1 Second Edition
CSA C22.2 No. 60950-1-07, 2nd Edition

MTBF
MTBF estimate: 70,000 hours

PRODUCT WARRANTY
15 months

HONEYWELL DECODER BOARD FAMILY OVERVIEW

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For a complete listing of all supported bar code symbologies, please visit www.honeywellaidc.com/symbologies.