INT55MX

Turbo SIMPLE™ Module

Intellon
NO NEW WIRES.

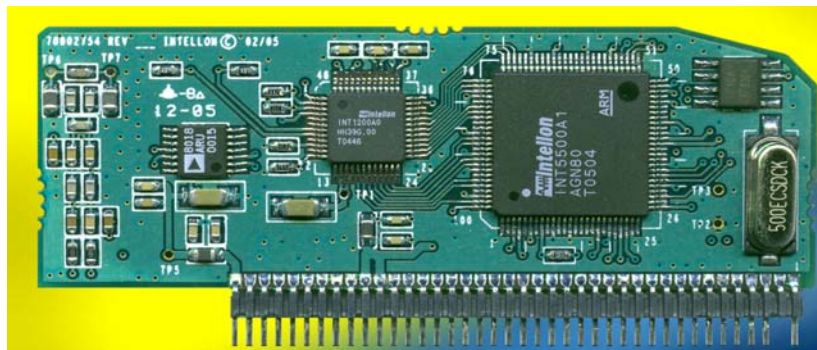## Features

- Based on Intellon's Turbo INT5500CS chipset providing up to 85Mbps data rate on the powerline

- HomePlug 1.0 compatible

- Integrates all components necessary to add HomePlug functionality to any embedded system at industry's lowest cost

- Complete manufacturing kit for *easy* production and *fast* time-to-market

- Compact vertical or right-angle mounting design using Intellon's SIMPLE PowerBus connector

- Minimum footprint

- Simplifies development cycle, assembly, testing, and certification approvals

- Module can be self manufactured or sourced from Intellon's manufacturing partners

- Flash programming via host interface supports ease of manufacture and firmware upgradability

- Upgrade path to future High Speed HomePlug AV SIMPLE modules

- 40-pin low power consumption package

- Licensed to use Intellon PowerPacket and No New Wires registered marks

Benefits

Intellon's INT55MX Turbo SIMPLE Module is the third-generation module of the SIMPLE (Single Inline Module – Power Line Enabled) family. As Intellon introduces new Baseband and AFE ICs, products incorporating Intellon SIMPLE module can be upgraded to future SIMPLE modules to provide improved performance, functionality and/ or reduced cost with minimum adaptation of existing product designs.

Based on Intellon's turbo chipset INT5500CS, the INT55MX SIMPLE module integrates most of the components required for HomePlug functionalities on a tiny single in-line package. This package can be easily connected into any existing embedded system via the proprietary SIMPLE PowerBus™ header, instantly adding HomePlug functionality with virtually no PCB space, and without the hassle of a system redesign.

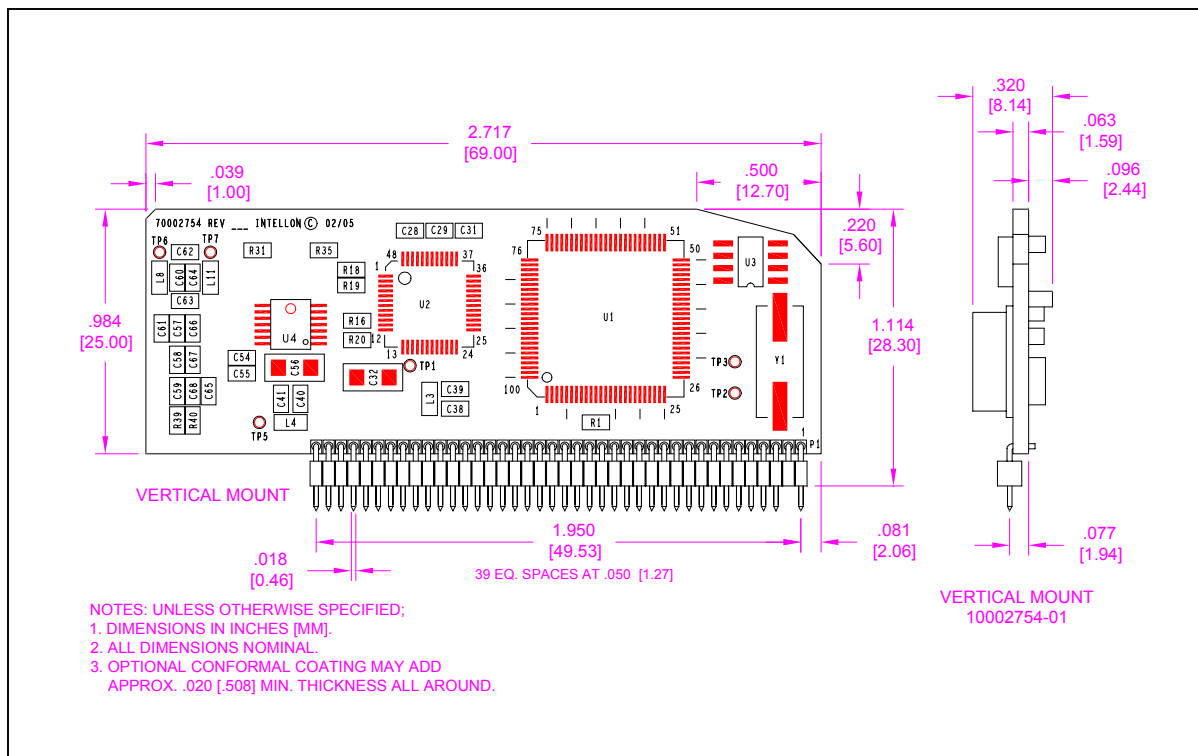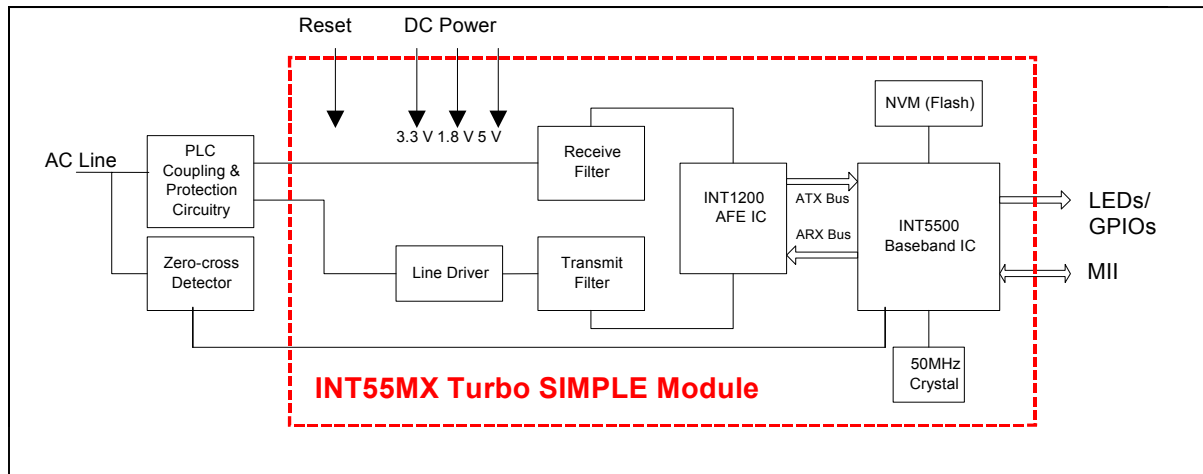The INT55MX is designed to fit in either of the following:

- Systems with an embedded power supply and no external electrical cord (wall adapters).
- Systems with AC or DC cords, directly to the power outlet or an external AC/DC adapter.

Each module integrates Intellon's INT5500 baseband and INT1200 AFE ICs, the crystal, the NVM (flash), line drivers and required filter circuitry. The PLC coupler, transient protection, and the AC zero-cross detector are the only external components required on the AC side of the main power supply. Available host interfaces for the INT55MX module are MII PHY or MII Host/DTE.

The INT55MX module is truly the industry's most integrated and cost effective way of adding HomePlug functionality to any embedded networking or consumer electronics product.

How can I get HomePlug into my product? SIMPLE, just plug it in!

Reset   DC Power

3.3 V 1.8 V 5 V

AC Line

PLC Coupling & Protection Circuitry

Zero-cross Detector

Receive Filter

Line Driver

Transmit Filter

INT1200 AFE IC

ATX Bus

ARX Bus

NVM (Flash)

INT5500 Baseband IC

50MHz Crystal

LEDs/ GPIOs

MII

INT55MX Turbo SIMPLE Module

2.717 [69.00]

.039 [1.00]

.500 [12.70]

.320 [8.14]

.063 [1.59]

.096 [2.44]

.220 [5.60]

70002754 REV ___ INTELLON© 02/05

.984 [25.00]

1.114 [28.30]

VERTICAL MOUNT

1.950 [49.53]

39 EQ. SPACES AT .050 [1.27]

.018 [0.46]

.081 [2.06]

.077 [1.94]

VERTICAL MOUNT
10002754-01

NOTES: UNLESS OTHERWISE SPECIFIED;
1. DIMENSIONS IN INCHES [MM].
2. ALL DIMENSIONS NOMINAL.
3. OPTIONAL CONFORMAL COATING MAY ADD
   APPROX. .020 [.508] MIN. THICKNESS ALL AROUND.

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NO NEW WIRES.

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HOMEPLUG
POWERLINE ALLIANCE

POWERPACKET™