



GT-Y3400 Installation Guide and User Manual



SAMSUNG ELECTRONICS.LTD.

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1 Introduction

1.1 Overview

This manual is intended to be a complete technical reference and integration guide for the GT-Y3400 module product.

1.1.1 Product description

The GT-Y3400 module described in this manual are PCI Express Mini Cards support WWAN (UMTS/HSPA+/HSUPA & GSM/GRPS/EDGE) connectivity to SAMSUNG notebooks.

The module is manufactured and installed by SAMSUNG. It includes diversity receiver and equalization. The following table shows photos of the module.

Bottom view

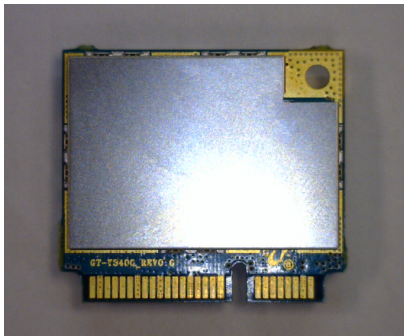


Figure 1. Bottom view of the GT-Y3400 module

Top view



Figure 2. Top view of the GT-Y3400 module

1.1.2 Key features and specifications

RF subsystem	-2G GPRS / EDGE / 3GPP WCDMA HSPA+/HSUPA
Platform	-ICERA Platform
Band	2G (850/900/1800/1900), 3G (BAND1/BAND2/BAND5/BAND8)
Size (mm)	- 30.0 x 26.8 x 4.72 mm
Weight (g)	-5.5g
Modem	-ICERA ICE8060T
Memory	-MCP 1Gb/512Mb (Nand/SDRAM)
RF	-ICERA ICE8260B
General Features	Mini PCI Express Card for Samsung Mini PC. (Half Type) GSM/GPRS/EDGE/UMTS/HSPA+ & HSUPA Support. Main Power is 3.3V and Rated Power Consumption is 900mA. UART, USB2.0 and Nexus IF Support (ICERA IF)
Modem	- High data rate (HSUPA 5.76Mbps, HSPA+ 21Mbps) - Dual antenna Rx diversity
Micro processor	- Embedded DXP Processor - Support Multi-mode EDGE,WCDMA,HSPA etc.
Interface	- High-speed USB functionality (2.0) - USIM controller - General Purpose I/O pins, UARTs.

2. Mechanical specifications

2.1 Specifications

2.1.1 Mechanical dimensions

Mechanical drawings of the GT-Y3400 module following one.

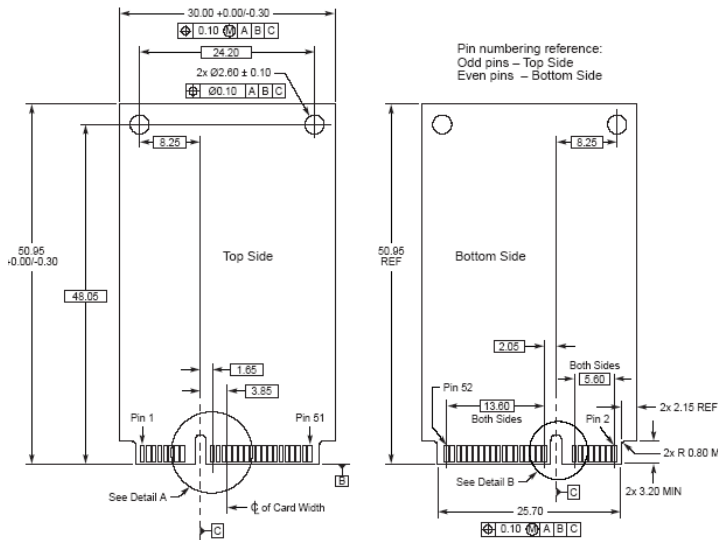


Figure 3. Mechanical dimensions of the GT-Y3400 module

2.1.2 Mini PCI Express interface

The card edge connector of the GT-Y3400 module complies with the PCI Express Mini Card specification and mates with a 52 pin Mini PCI Express connector.

This specification defines an implementation for small form factor PCI Express cards. The specification uses a qualified sub-set of the same signal protocol, electrical definitions, and configuration definitions as the *PCI Express Base Specification, Revision 1.1*. Where this specification does not explicitly define PCI Express characteristics, the *PCI Express Base Specification* governs.

The primary differences between a PCI Express add-in card (as defined by the *PCI Express Card Electromechanical Specification*) and a PCI Express Mini Card add-in card is a unique card form factor optimized for mobile computing platforms and a card-system interconnection optimized for communication applications. Specifically, PCI Express Mini Card add-in cards are smaller and have smaller connectors than standard PCI Express add-in cards.

Figure 4 shows a 52 pin PCI Express Mini Card connector.

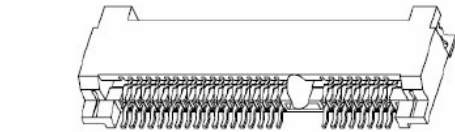


Figure 5 shows a conceptual drawing of this form factor as it may be installed in a mobile platform. Figure 5 does not reflect the actual dimensions and physical characteristics as those details are specified elsewhere in this specification. However, it is representative of the general concept of this specification to use a single system connector to support all necessary system interfaces by means of a common edge connector. Communications media interfaces may be provided via separate I/O connectors and RF connectors each with independent cables as illustrated in Figure 5.

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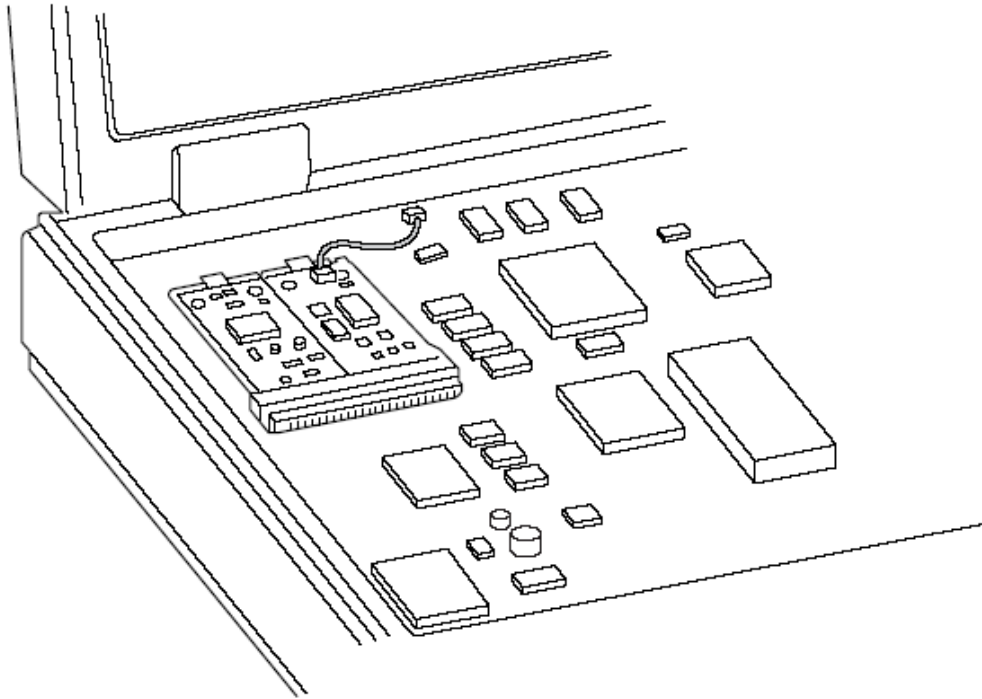


Figure 5. PCI Express Mini Card Add-in Card Installed in a Mobile Platform

2.1.3 Antenna connectors

The SMD connectors used for the antenna connections on the GT-Y3400 module are delivered by Hirose Ltd.

