

GPIO Expansion, PS/2, 23x8 Keyscan Matrix Interface via SMBus or BC-Link Bus

General Description

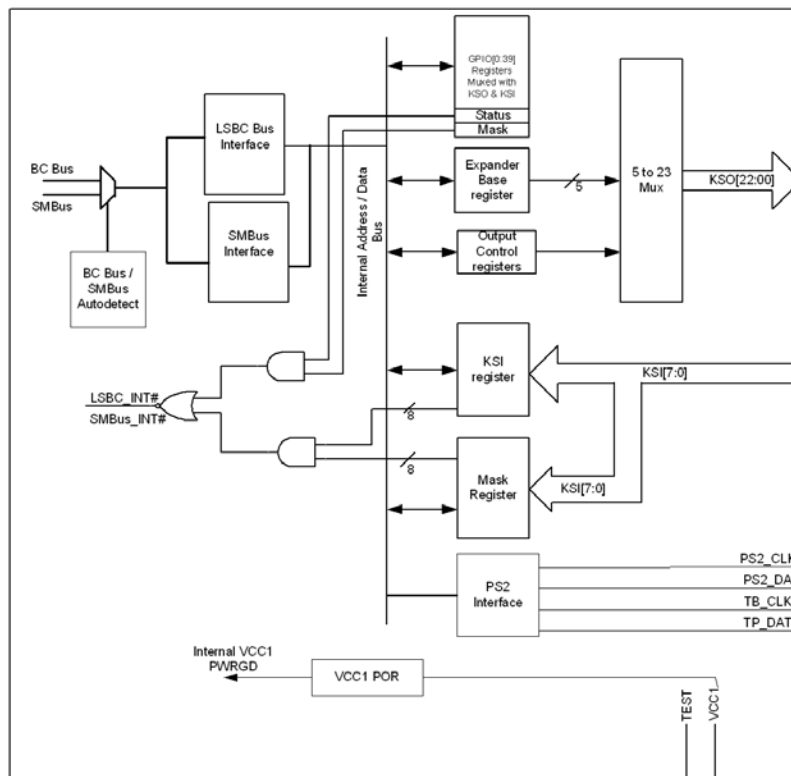
The ECE1105 is a 48-Pin 3.3V Keyboard Scan Expansion or GPIO Expansion device. The device supports a keyboard scan matrix of 23x8 and has two PS/2 ports for touchpad and/or pointer stick support. The device is connected to a Master via the BC-Link™ interface or via the SMBus.

KSI and KSO signals are multiplexed with GPIOs.

Features

- Up to 23x8 Keyboard Scan Matrix
- Two PS/2 Ports
 - Touch Pad Support
 - Pointer Stick Support
- 40 Multiplexed General Purpose I/O pins
 - All are MCU addressable I/O Pins
- BC-Link Interconnect Bus
 - Link to embedded controller
- SMBus Interconnect
 - One of two address selection
- 3.3V Operation
 - 48-Pin, QFN RoHS Compliant package
 - 0.5mm Pitch
 - 7x7m Body size

Block Diagram



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PACKAGE OUTLINE

FIGURE 1: PACKAGE OUTLINE: 48-PIN QFN, 7X7 MM BODY (1 OF 2)

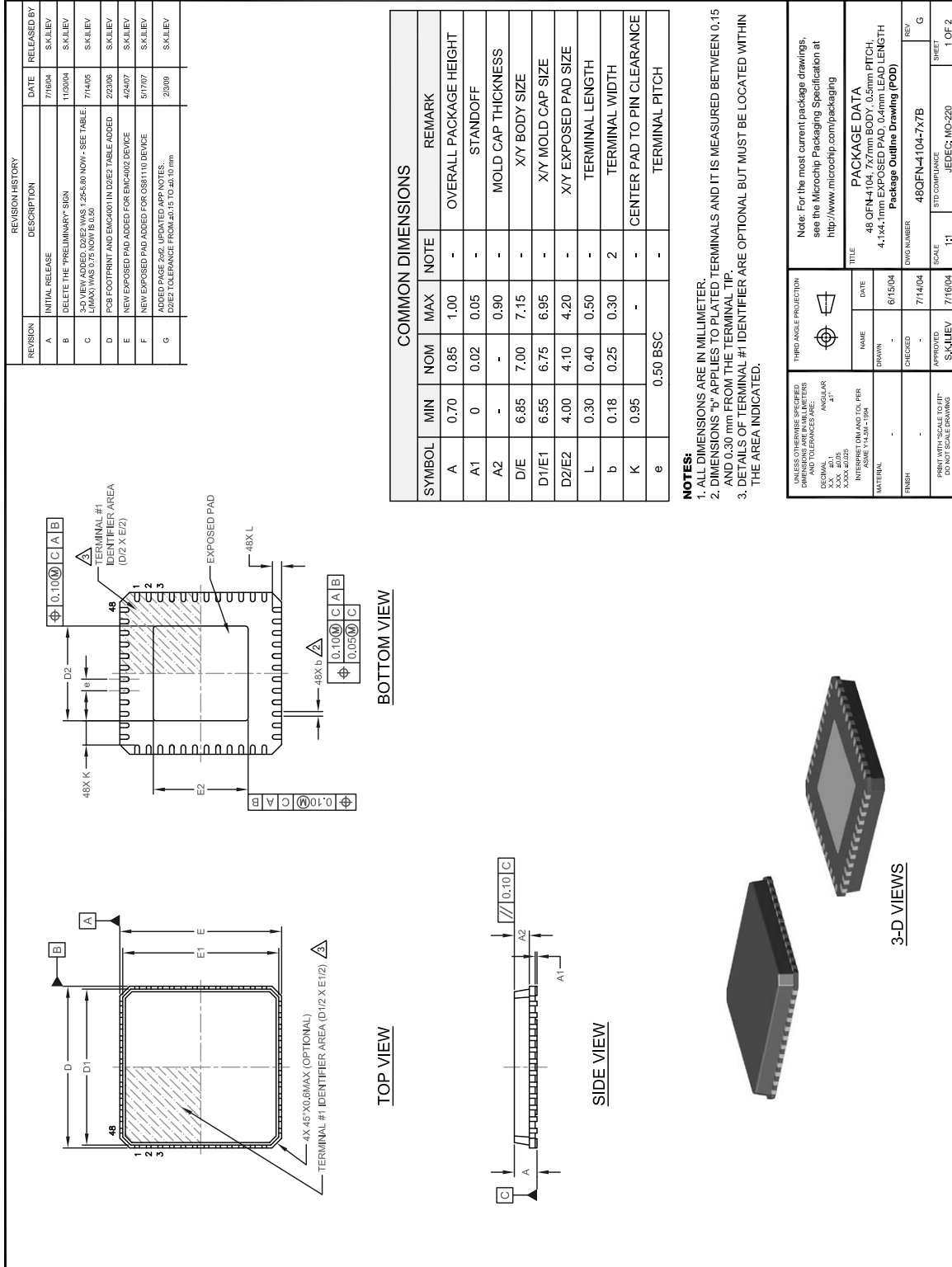
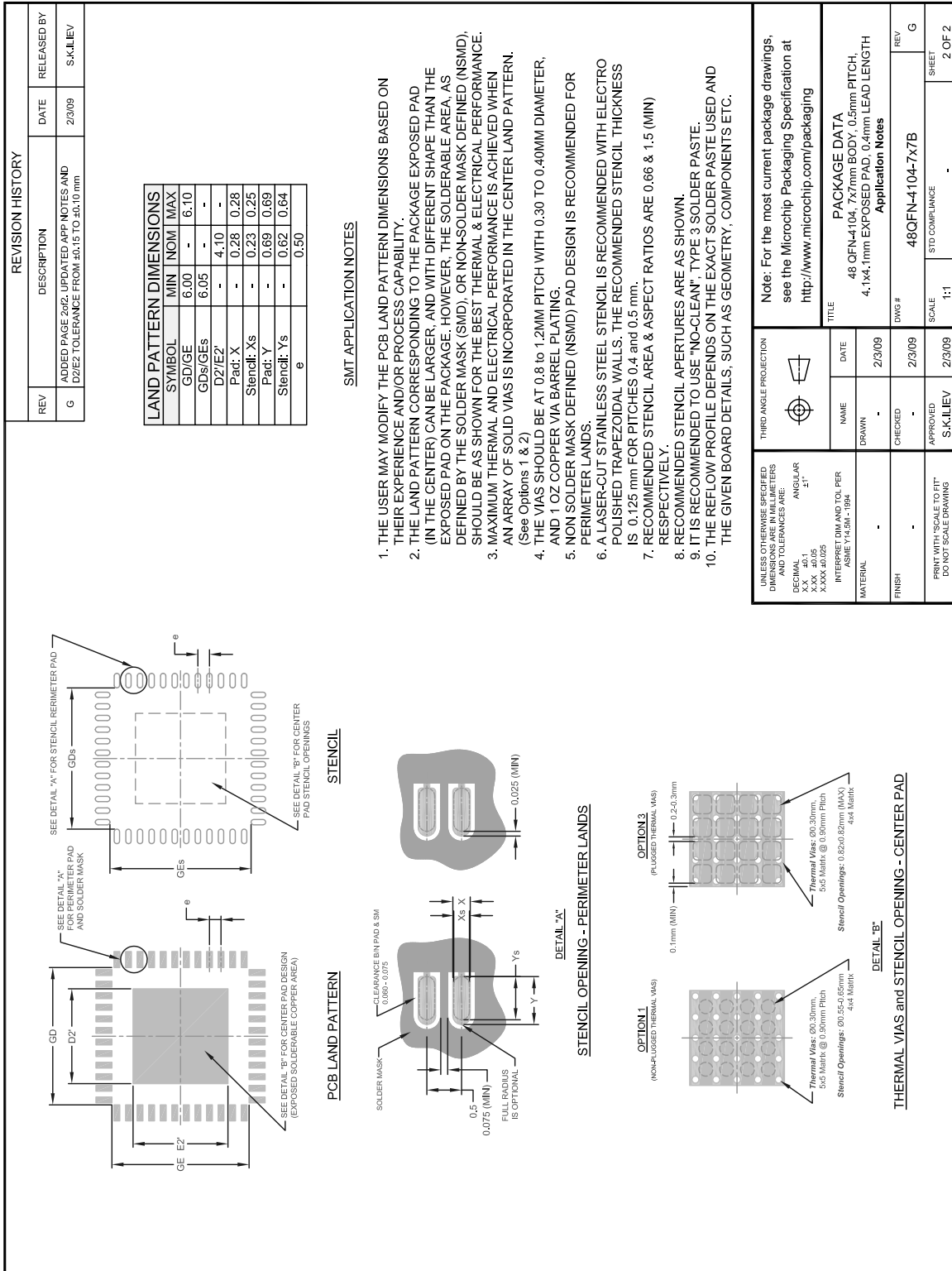


FIGURE 2: PACKAGE OUTLINE: 48-PIN QFN, 7X7 MM BODY (2 OF 2)



APPENDIX A: PRODUCT BRIEF REVISION HISTORY

TABLE A-1: REVISION HISTORY

| Revision | Section/Figure/Entry | Correction |
|------------------------|--|------------|
| DS00001729A (04-29-14) | REV A replaces previous SMSC version Rev. 1.6 (02-21-11) | |

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| PART NO. ⁽¹⁾ | [X] | - | XXX ⁽²⁾ | - | [X] ⁽³⁾ |
|--------------------------------|--|---|---------------------------|---|-----------------------------|
| Device | Temperature Range | | Package | | Tape and Reel Option |
| Device: | ECE1105 ⁽¹⁾ | | | | |
| Temperature Range: | Blank = Commercial 0°C to 70°C I = Industrial -40°C to 85°C | | | | |
| Package: | HZH = 48 pin QFN ⁽²⁾ | | | | |
| Tape and Reel Option: | Blank = Tray packaging TR = Tape and Reel ⁽³⁾ | | | | |

Examples:

a) ECE1105-HZH = 48-pin QFN, Commercial
 b) ECE1105I-HZH = 48-pin QFN, Industrial

Note 1: These products meet the halogen maximum concentration values per IEC61249-2-21.

Note 2: All package options are RoHS compliant. For RoHS compliance and environmental information, please visit <http://www.microchip.com/pagehandler/en-us/aboutus/ehs.html>.

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