

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

General Description

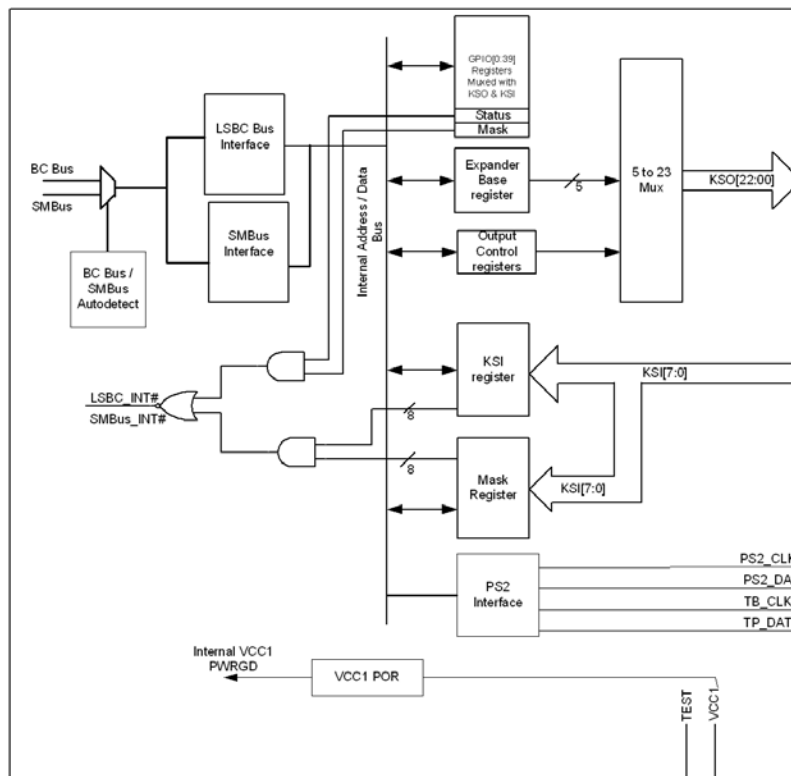
The ECE1105 is a 48-Pin 3.3V Keyboard Scan Expansion or GPIO Expansion device. The device supports a keyboard scan matrix of 23x8 and has two PS/2 ports for touchpad and/or pointer stick support. The device is connected to a Master via the BC-Link™ interface or via the SMBus.

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
 - 7x7mm Body size

Block Diagram



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PACKAGE OUTLINE

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

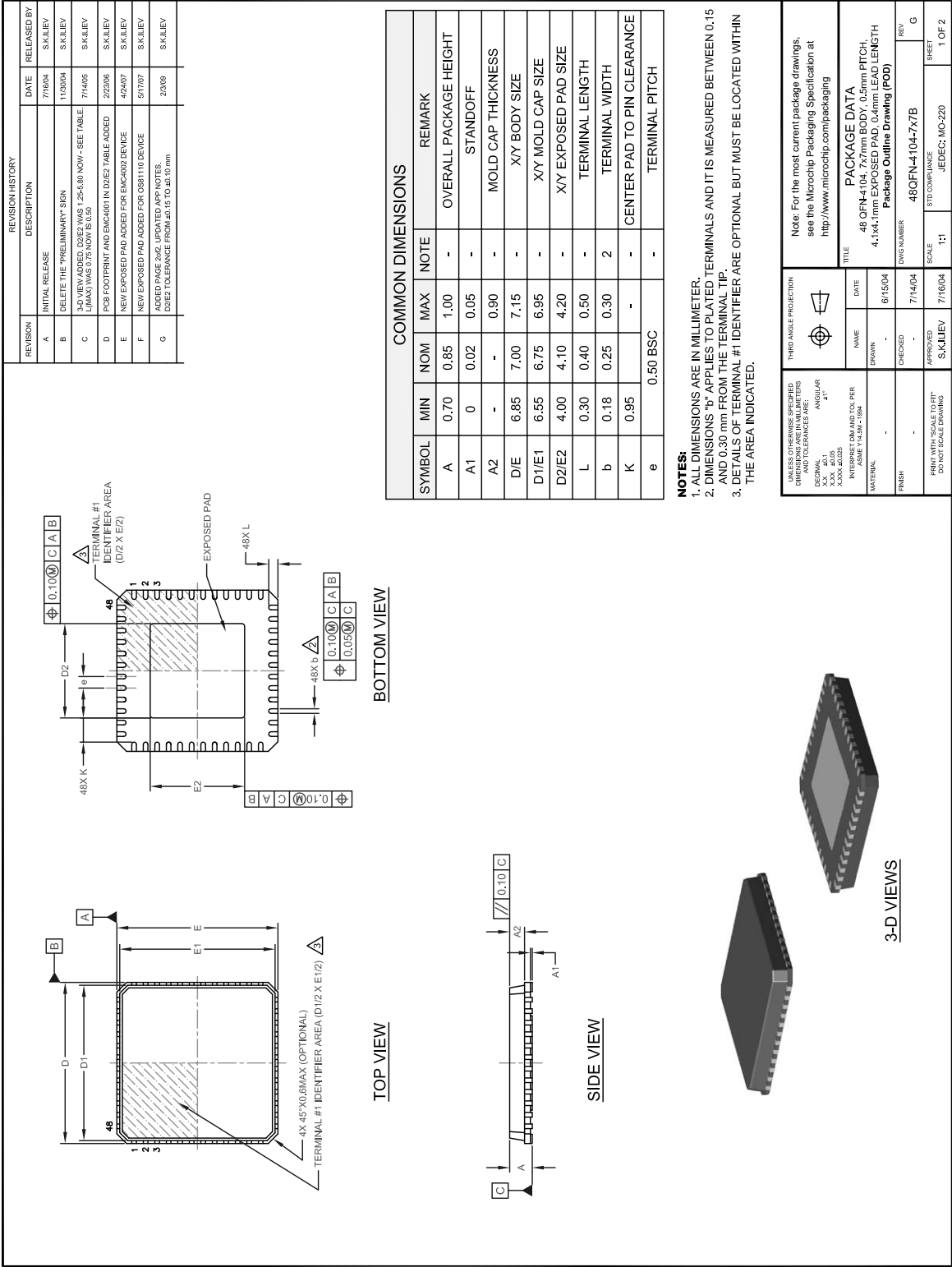
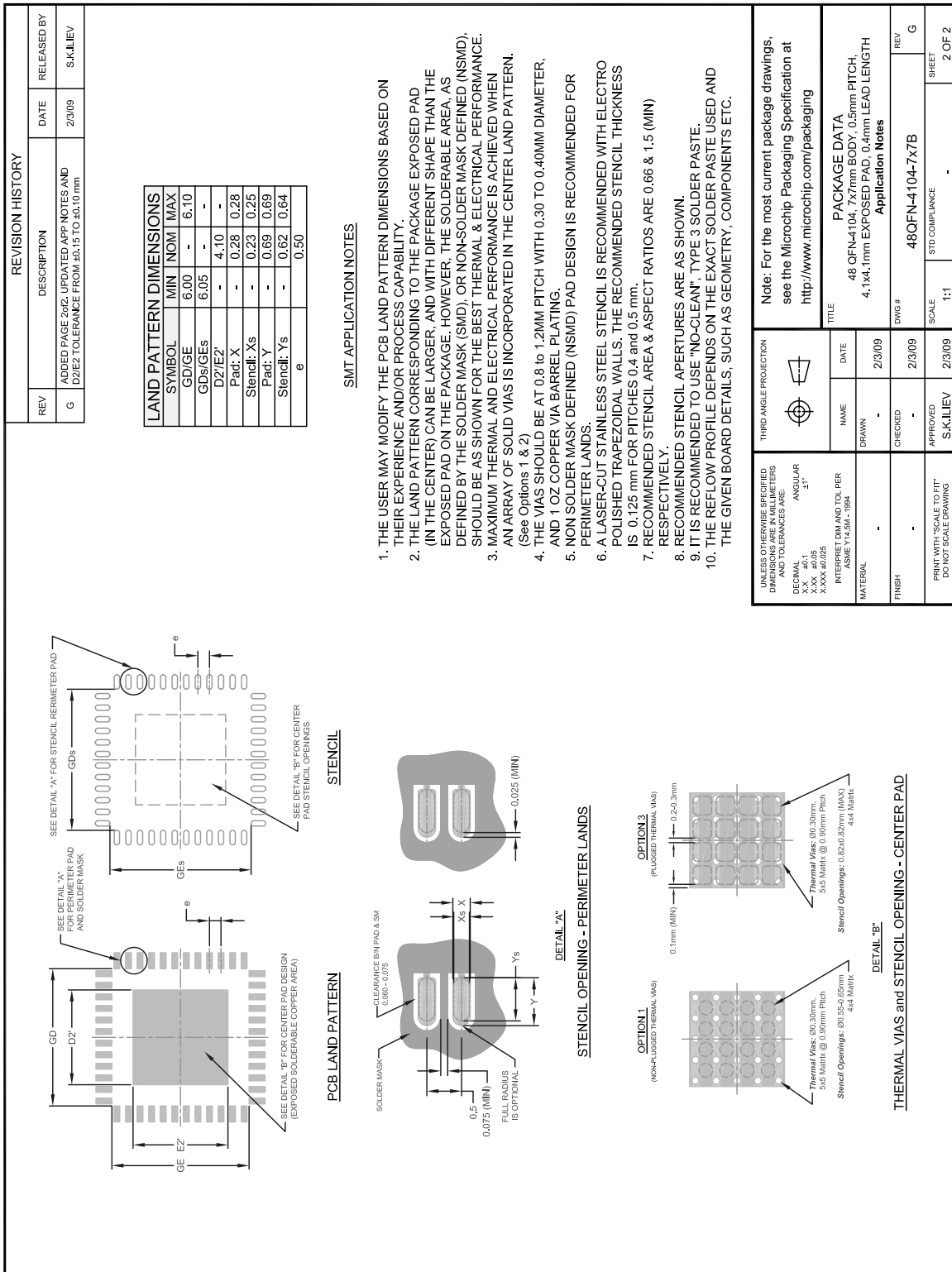


FIGURE 2: PACKAGE OUTLINE: 48-PIN QFN, 7X7 MM BODY (2 OF 2)



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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<u>PART NO.</u> ⁽¹⁾	<u>[X]</u>	-	<u>XXX</u> ⁽²⁾	-	<u>[X]</u> ⁽³⁾																																				
Device	Temperature Range		Package		Tape and Reel Option																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Device:</td> <td colspan="5">ECE1105 ⁽¹⁾</td> </tr> <tr> <td>Temperature Range:</td> <td>Blank =</td> <td colspan="4">Commercial 0°C to 70°C</td> </tr> <tr> <td></td> <td>I =</td> <td colspan="4">Industrial -40°C to 85°C</td> </tr> <tr> <td>Package:</td> <td>HZH =</td> <td colspan="4">48 pin QFN ⁽²⁾</td> </tr> <tr> <td>Tape and Reel Option:</td> <td>Blank =</td> <td colspan="4">Tray packaging</td> </tr> <tr> <td></td> <td>TR =</td> <td colspan="4">Tape and Reel ⁽³⁾</td> </tr> </table>						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⁾			
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<p>Examples:</p> <p>a) ECE1105-HZH = 48-pin QFN, Commercial b) ECE1105I-HZH = 48-pin QFN, Industrial</p> <p>Note 1: These products meet the halogen maximum concentration values per IEC61249-2-21.</p> <p>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.</p> <p>Note 3: Tape and Reel identifier only appears in the catalog part number description. This identifier is used for ordering purposes and is not printed on the device package. Check with your Microchip Sales Office for package availability with the Tape and Reel option.</p>																																									

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