

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

### General Description

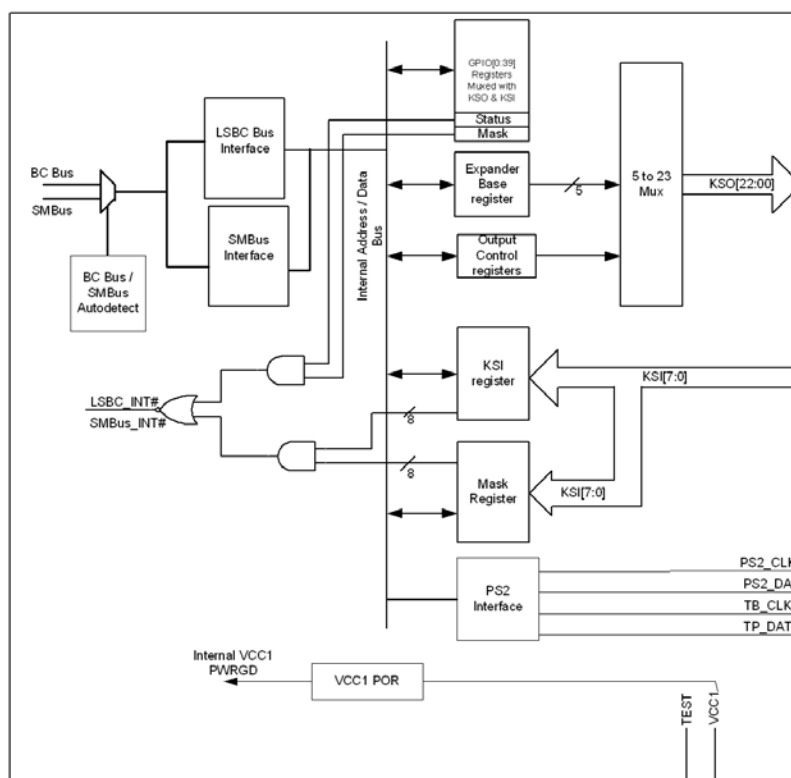
The ECE1105 is a 48-Pin 3.3V Keyboard Scan Expansion or GPIO Expansion device. The device supports a keyboard scan matrix of 23x8 and has two PS/2 ports for touchpad and/or pointer stick support. The device is connected to a Master via the BC-Link™ interface or via the SMBus.

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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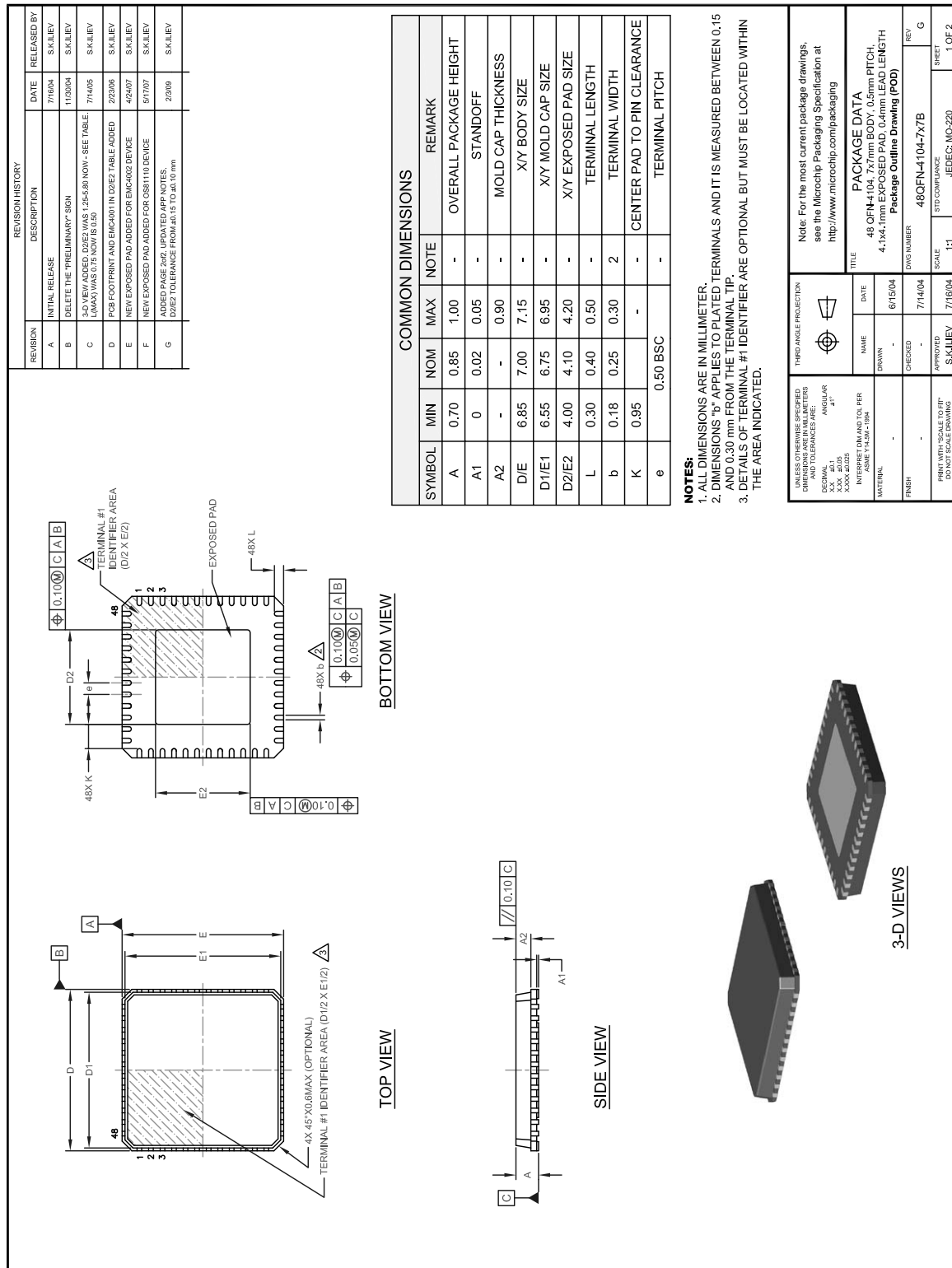
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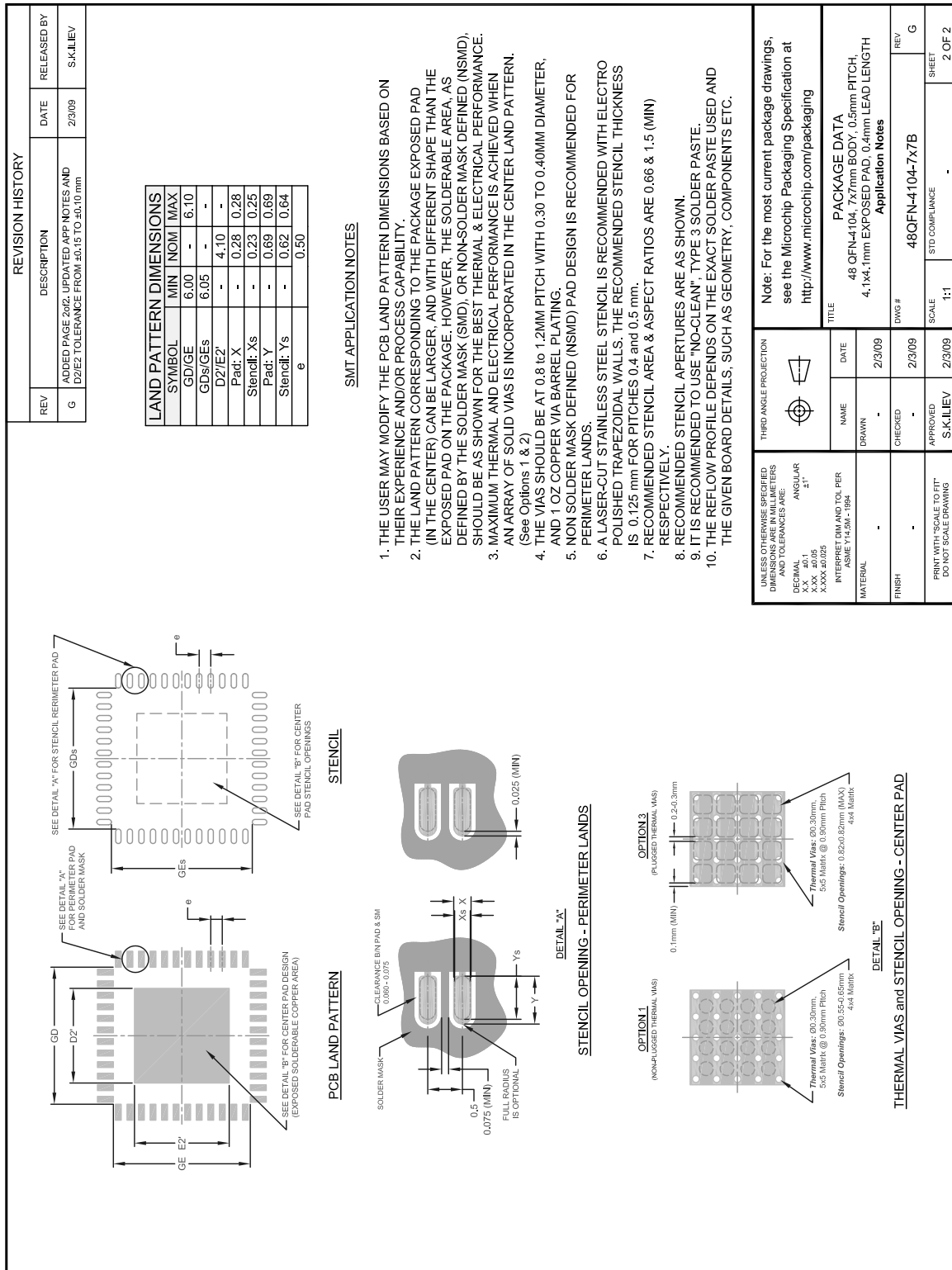
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## PACKAGE OUTLINE

**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> <sup>(1)</sup>	<u>[X]</u>	-	<u>XXX</u> <sup>(2)</sup>	-	<u>[X]</u> <sup>(3)</sup>
Device	Temperature Range		Package		Tape and Reel Option
Device: ECE1105 <sup>(1)</sup>					
Temperature Range:	Blank = Commercial 0°C to 70°C I = Industrial -40°C to 85°C				
Package: HZH = 48 pin QFN <sup>(2)</sup>					
Tape and Reel Option:	Blank = Tray packaging TR = Tape and Reel <sup>(3)</sup>				

**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.  
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