ECE1099

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

General Description

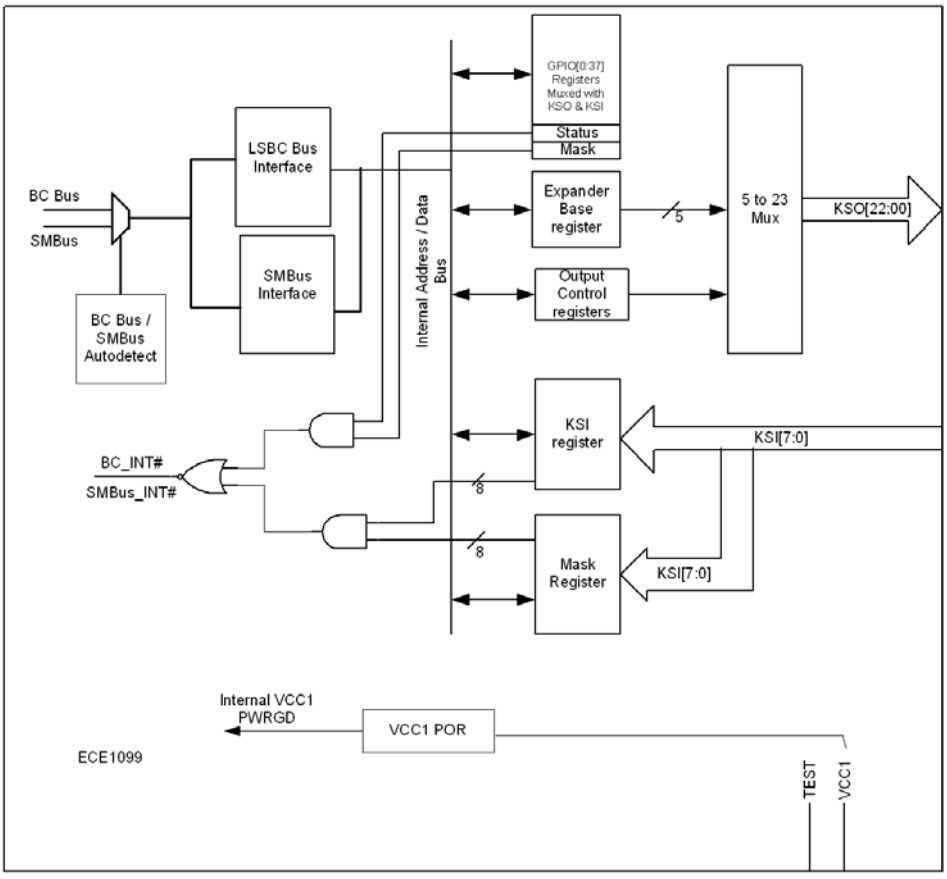
The ECE1099 is a 40-Pin 3.3V Keyboard Scan Expansion or GPIO Expansion device. The device supports a keyboard scan matrix of 23x8. The device is connected to a Master via the BC-Link™ interface or via the SMBus.

KSI and KSO signals are multiplexed with GPIOs.

Features

- Up to 23x8 Keyboard Scan Matrix
- 32 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
  - 40-Pin, QFN RoHS Compliant package
  - 0.5mm Pitch
  - 6x6mm Body size

Block Diagram



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PACKAGE OUTLINE

FIGURE 1: PACKAGE OUTLINE: 40-PIN QFN, 6X6 MM BODY (1 OF 2)

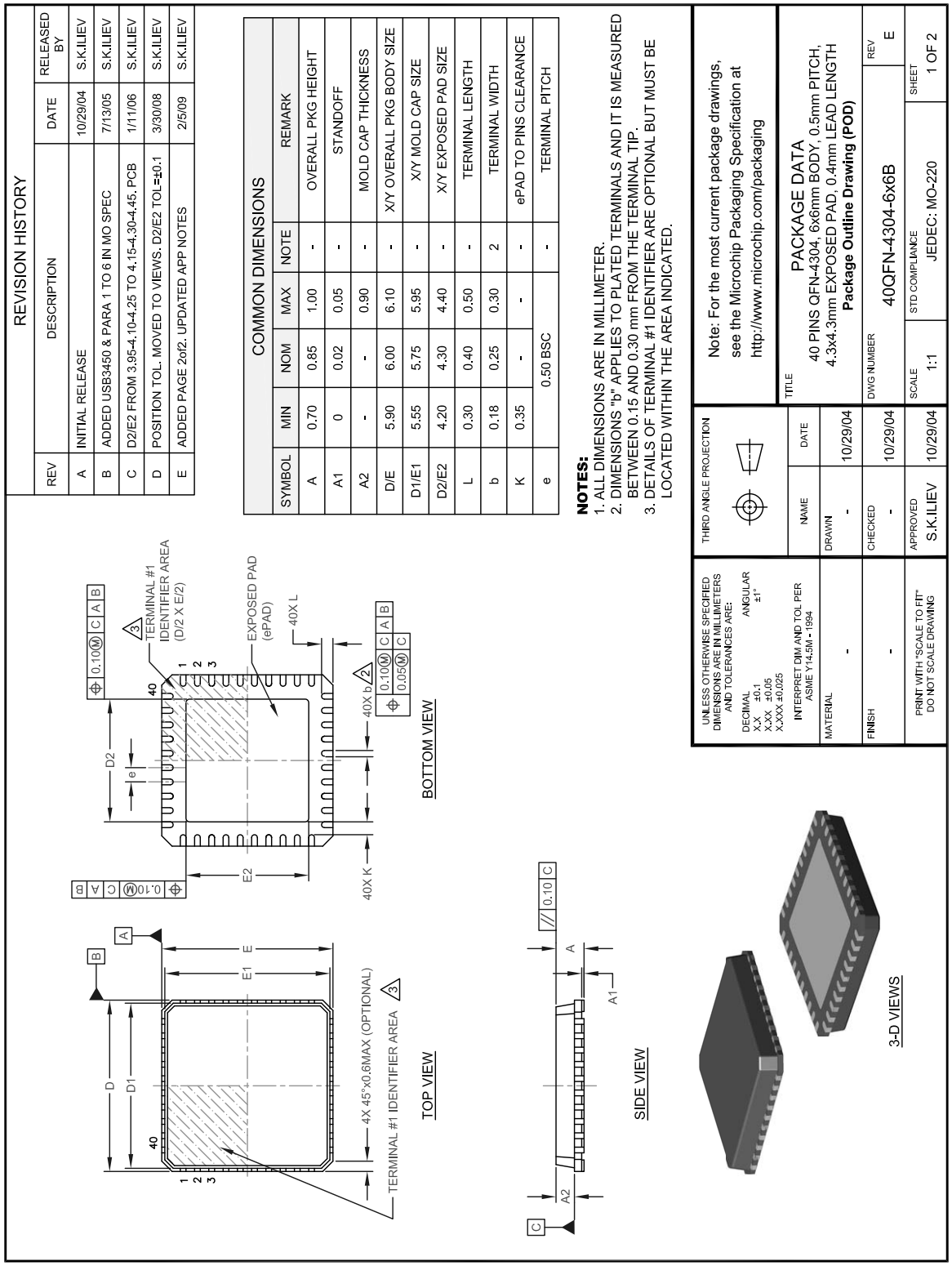
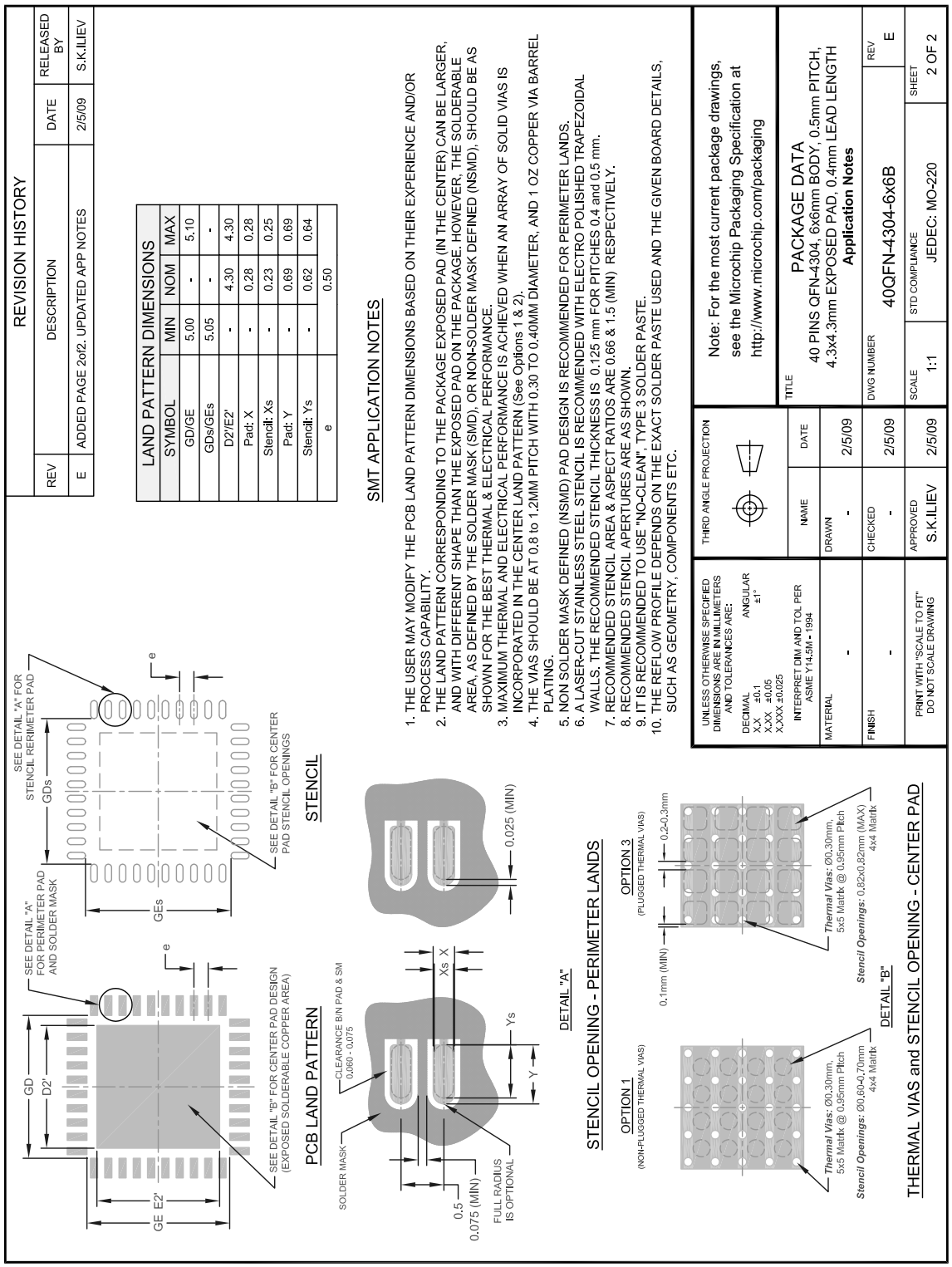


FIGURE 2: PACKAGE OUTLINE: 40-PIN QFN, 6X6 MM BODY (2 OF 2)



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APPENDIX A: PRODUCT BRIEF REVISION HISTORY

TABLE A-1: REVISION HISTORY

Revision	Section/Figure/Entry	Correction
DS00001728A (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:	ECE1099 [1]	
Temperature Range:	Blank =	Commercial 0°C to 70°C
	X =	Extended 0°C to 85°C
Package:	FZG =	40 pin QFN [2]
Tape and Reel Option:	Blank =	Tray packaging
	TR =	Tape and Reel [3]

Examples:

a) ECE1099-FZG = 40-pin QFN, Commercial
b) ECE1099X-FZG = 40-pin QFN, Extended

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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