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## Advanced Notebook I/O for LPC Designs with Three Serial Ports

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### Product Features

- 3.3 Volt Operation (5 Volt Tolerant)
- PC99, PC01, ACPI 1.0 Compliant
- LPC Interface
  - Supports LPC Bus frequencies of 19.2MHz to 33MHz
- Serial IRQ Compatible with Serialized IRQ Support for PCI Systems
- Programmable Wake-up Event (PME) Interface
- 24 General Purpose Input/Output Pins
- System Management Interrupt
- Serial Ports
  - Three Full Function Serial Ports
  - High Speed NS16C550A Compatible UARTs with Send/Receive 16-Byte FIFOs
  - Supports 230k and 460k Baud
  - Programmable Baud Rate Generator
  - Modem Control Circuitry
  - 480 Address and 15 IRQ Options
- Infrared Communications Controller
  - IrDA v1.2 (4Mbps), HPSIR, ASKIR, Consumer IR Support
  - 2 IR Ports
  - 96 Base I/O Address, 15 IRQ, and 4 DMA Options
- Two LED Drivers with blinking options
- Watch Dog Timer with optional output pin
- 64-Pin QFN RoHS Compliant package

### Description

The SIO1028 is a single chip LPC I/O device. The SIO1028 is a 3.3V operational (5.0V tolerant), PC 99/2001, and ACPI 1.0 compliant Super I/O Controller.

The SIO1028 includes 24 GPIO pins, support for two LED's with blinking option and a Watchdog Timer (WDT) with optional output pin. The SIO1028 includes three 16C550A compatible UARTs. One UART includes additional support for a Serial Infrared Interface that complies with IrDA v1.2 (Fast IR), HPSIR, and ASKIR formats, as well as Consumer IR.

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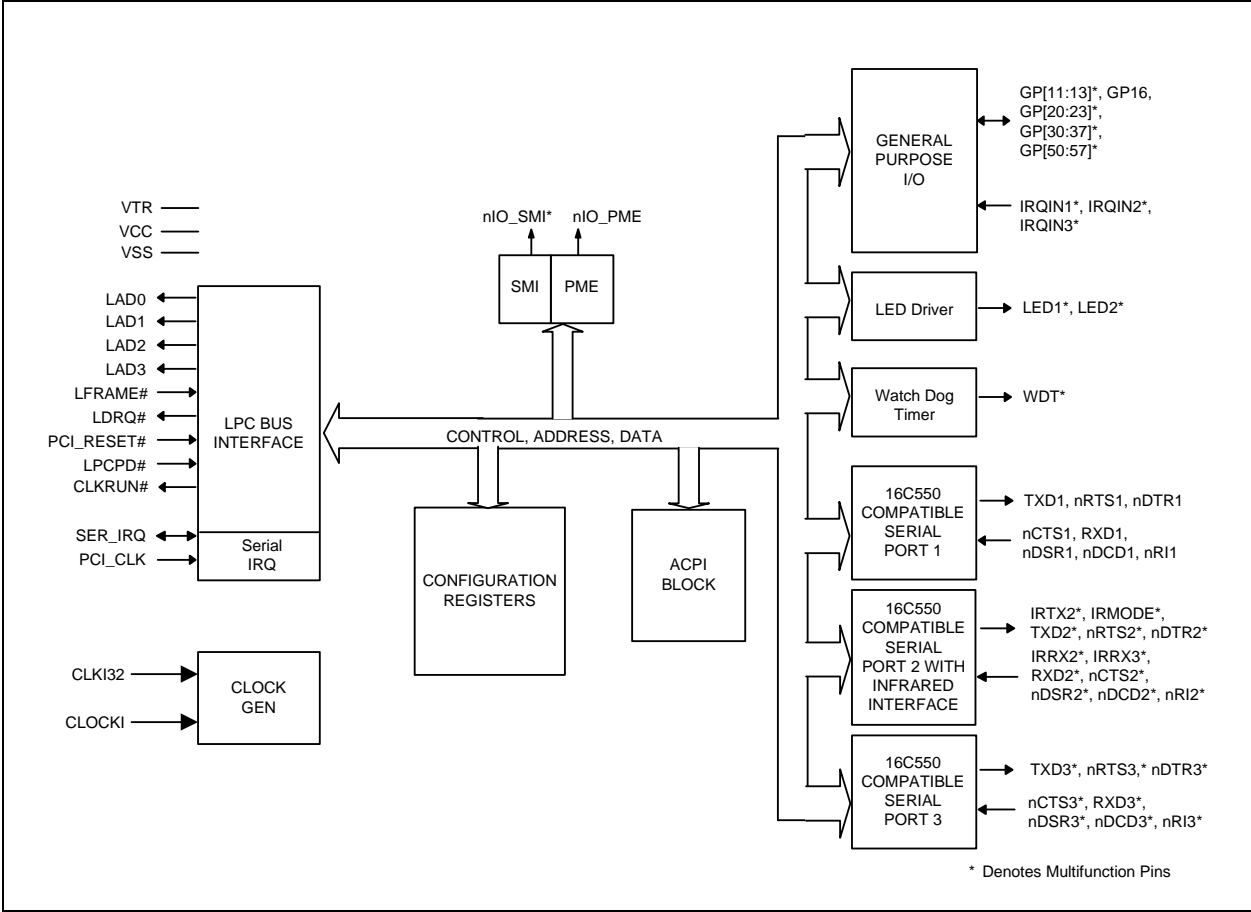
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## BLOCK DIAGRAM

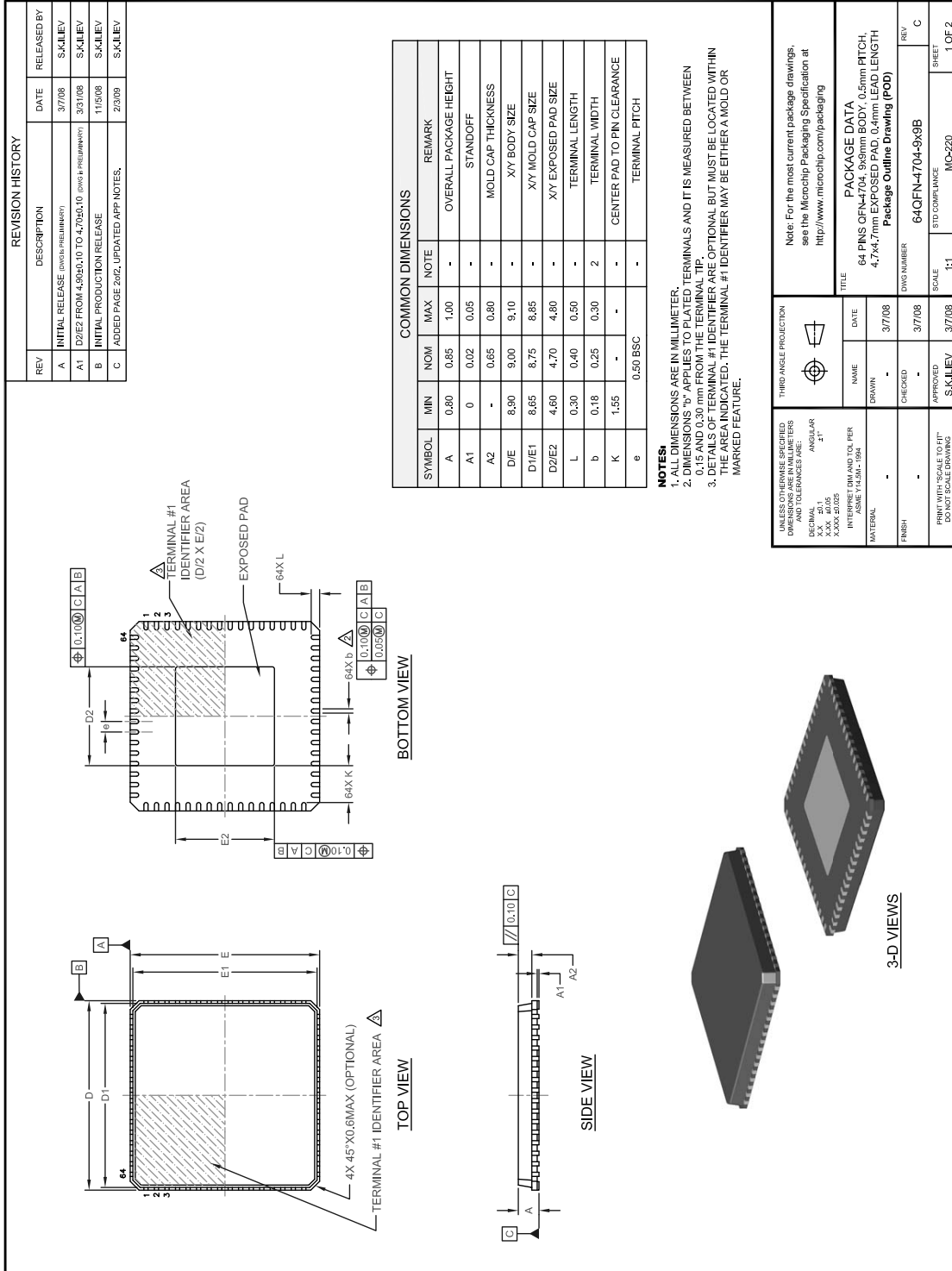
FIGURE 1: SIO1028 BLOCK DIAGRAM



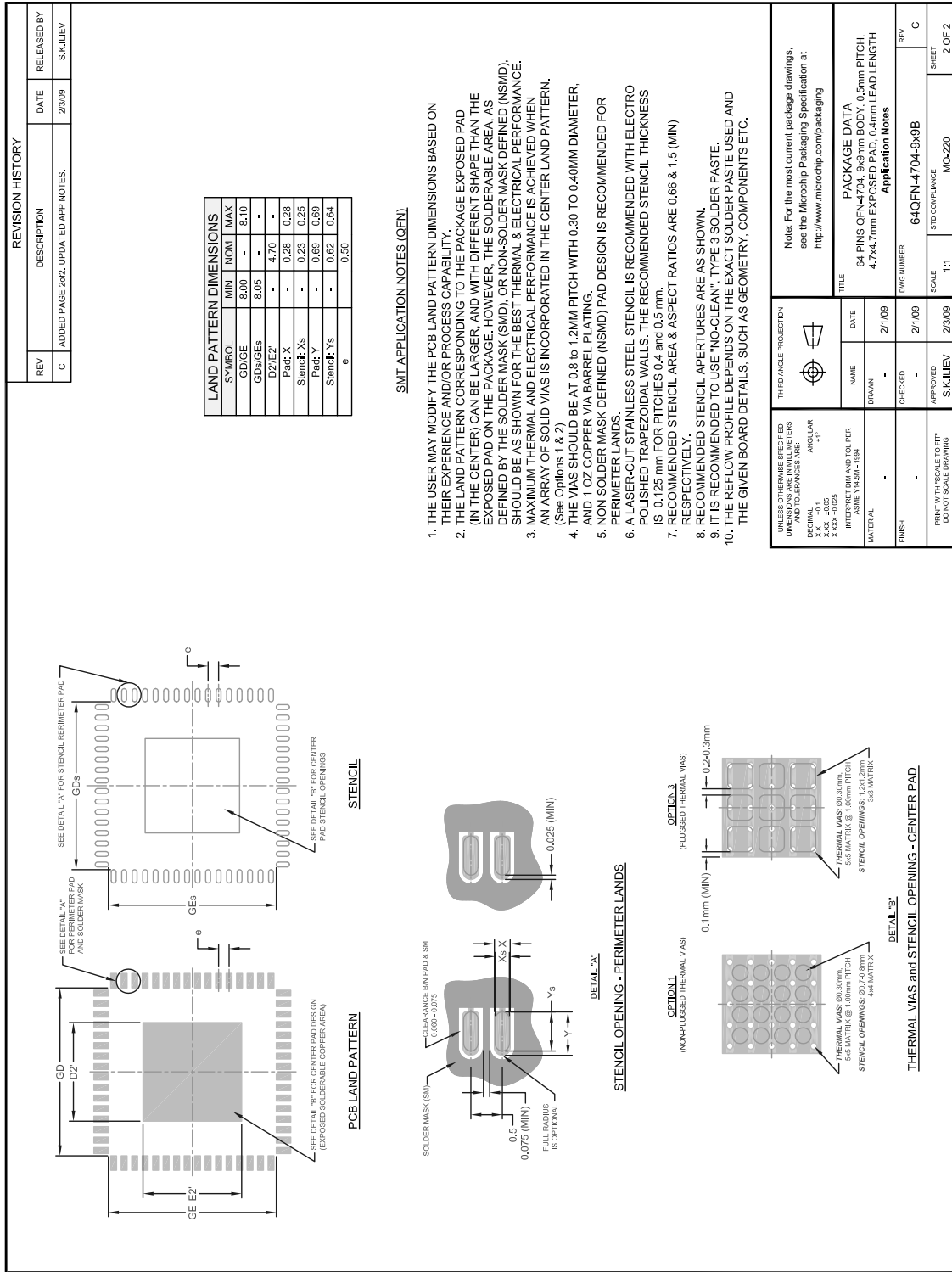
# SIO1028

## PACKAGE OUTLINE

FIGURE 2: SIO1028 64-PIN QFN PACKAGE, 9 X 9MM BODY, 0.5MM PITCH



**FIGURE 2: SIO1028 64-PIN QFN PACKAGE, 9 X 9MM BODY, 0.5MM PITCH (CONTINUED)**



# SIO1028

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## APPENDIX A: PRODUCT BRIEF REVISION HISTORY

TABLE A-1: REVISION HISTORY

Revision	Section/Figure/Entry	Correction
DS00001818A (08-15-14)	Replaces previous SMSC version Rev. 0.5 (11-02-09)	

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# SIO1028

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<u>PART NO.</u> <sup>(1)</sup>	-	<u>XXX</u> <sup>(2)</sup>	-	<u>IX1</u> <sup>(3)</sup>
Device		Package		Tape and Reel Option
Device:		SIO1028 <sup>(1)</sup>		
Package:	JZX	= 64-pin QFN <sup>(2)</sup>		
Tape and Reel Option:	Blank	= Tray packaging		
	TR	= Tape and Reel <sup>(3)</sup>		

**Examples:**

a) SIO1028-JZX = 64-pin QFN  
b) SIO1028-JZX-TR = 64-pin QFN Tape and Reel

**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>.

**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.



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ISBN: 9781632765277

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