

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

### **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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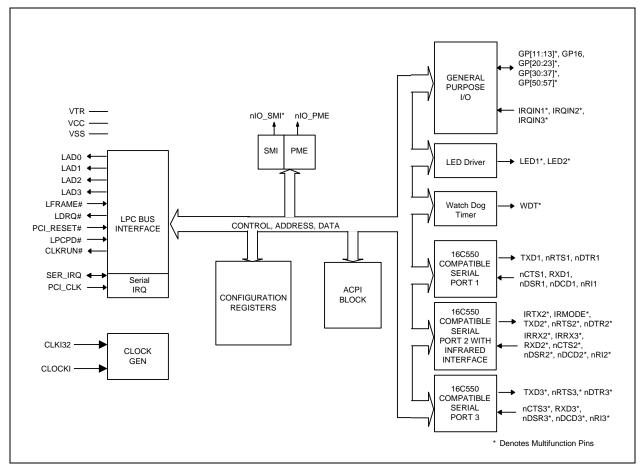
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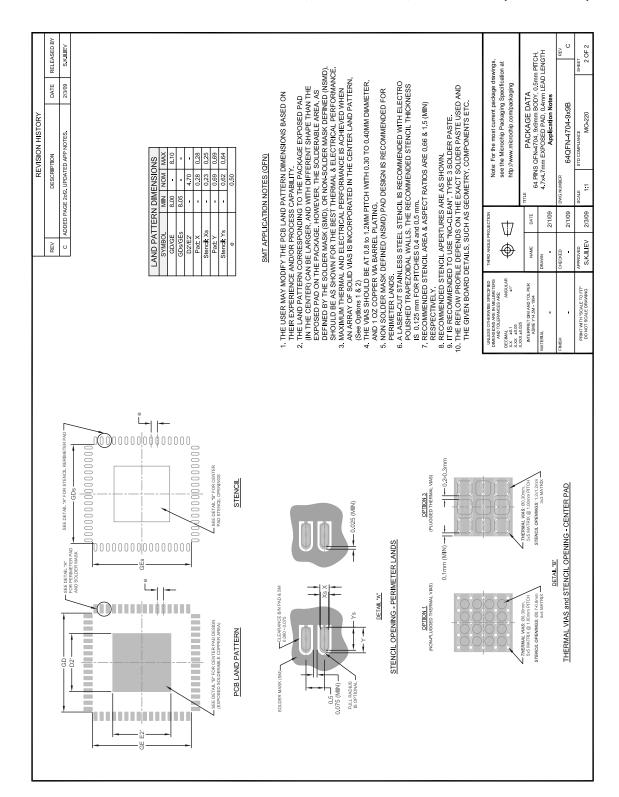




# PACKAGE OUTLINE

REVISION HISTORY	DATE RELEASED BY	3/7/08 S.K.ILEV	(DWG IS PRELIMINARY) 3/31/08 S.K.ILIEV	11/5/08	IOTES. 2/3/09 S.K.ILIEV			REMARK	OVERALL PACKAGE HEIGHT	STANDOFF	MOLD CAP THICKNESS	X/Y BODY SIZE	X/Y MOLD CAP SIZE	X/Y EXPOSED PAD SIZE	TERMINAL LENGTH	TERMINAL WIDTH	CENTER PAD TO PIN CLEARANCE	TERMINAL PITCH	NOTES 1. ALL DIMENSIONS ARE IN MILLIMETER, 2. DIMENSIONS ARE IN MILLIMETER, 2. DIMENSIONS ARE IN MILLIMETER, 3. DETAILS OF TERMINAL #1 IDENTIFIER ARE OPTIONAL BUT MUST BE LOCATED WITHIN 3. DETAILS OF TERMINAL #1 IDENTIFIER MAY BE ETHER A MOLD OR MARKED FEATURE.	Note: For the most current package drawings, see the Microchip Packaging Specification at http://www.microchip.com/packaging	PACKAGE DATA 4704, 9x9mm BODY, 0.5mm PITCH,	4 7x4.7mm EXPOSED PAD, 0.4mm LEAD LENGTH Package Outline Drawing (POD)	64QFN-4704-9x9B C	PLANCE SHEET
REVISION	DESCRIPTION	NITIAL RELEASE (DW316 PRELIMINARY)	D2/E2 FROM 4 90±0 10 TO 4 70±0 10 (ows is PRELIMMARY)	INITIAL PRODUCTION RELEASE	ADDED PAGE 20/2. UPDATED APP NOTES.		COMMON DIMENSIONS	NOTE	-		-		•	~ ·	•	2	- CENT	•	TERMINALS AND I L. TIP ARE OPTIONAL BL #1 IDENTIFIER MA	Note: For th see the Mic http://www.i	64 PINS QFN-4	4.7x4.7mm EXF Packa	DWG NUMBER 64QF	SCALE STD COMPLIANCE
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## 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)

# 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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PART NO. <sup>(1)</sup> Device	- <u>XXX<sup>(2)</sup> - [X]<sup>(3)</sup></u> Package Tape and Reel Option	Examples: a) SIO1028-JZX = 64-pin QFN b) SIO1028-JZX-TR = 64-pin QFN Tape and Reel
Device:	SIO1028 <sup>(1)</sup>	<b>Note 1:</b> These products meet the halogen maximum concentration values per IEC61249-2-21.
Package: Tape and Reel Option:	JZX = 64-pin QFN <sup>(2)</sup> Blank = Tray packaging TR = Tape and Reel <sup>(3)</sup>	Note 2: All package options are RoHS compliant. For RoHS compliance and environmental information, please visit <u>http://www.micro- chip.com/pagehandler/en-us/aboutus/ ehs.html</u> .
		Note 3: Tape and Reel identifier only appears in the catalog part number description. This identi- fier 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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