

## **SIO1028**

# 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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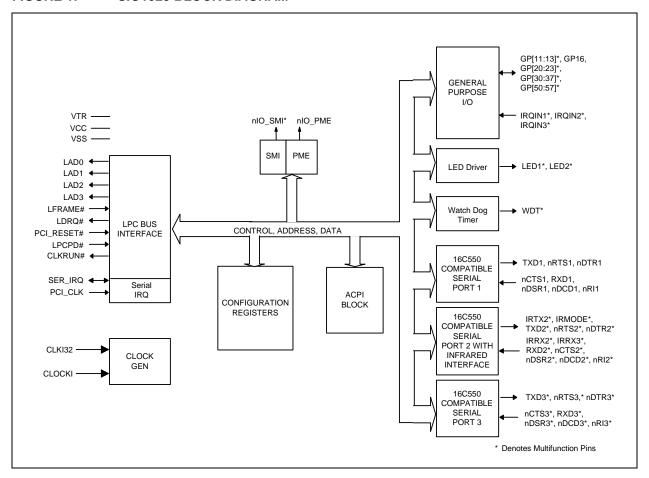
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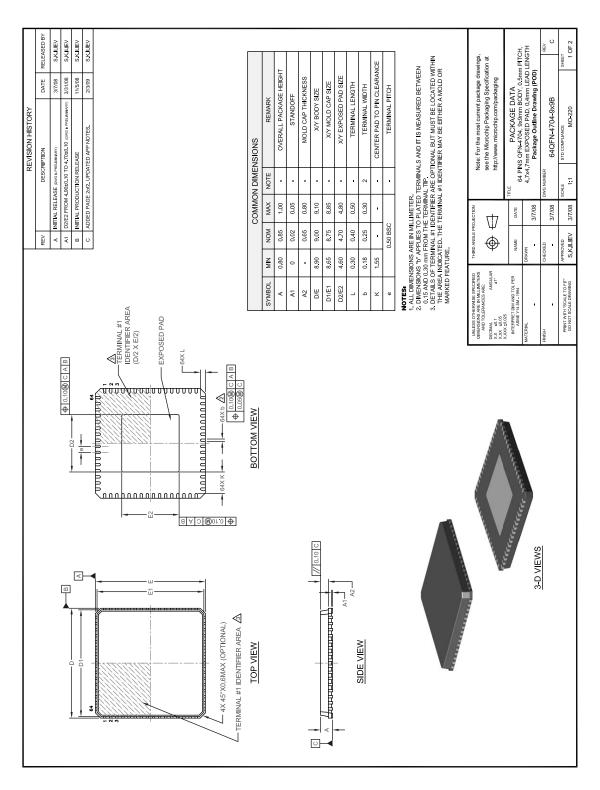
#### **BLOCK DIAGRAM**

FIGURE 1: SIO1028 BLOCK DIAGRAM

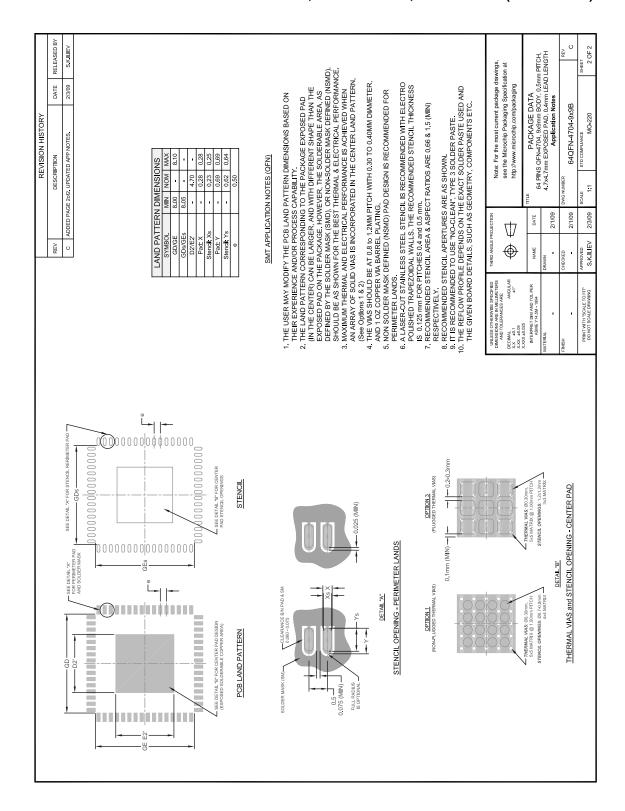


#### **PACKAGE OUTLINE**

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**

#### 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	- XXX <sup>(2)</sup> - [X] <sup>(3)</sup>   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 (3)

#### **Examples:**

- SIO1028-JZX = 64-pin QFN SIO1028-JZX-TR = 64-pin QFN Tape and Reel
- These products meet the halogen maximum Note 1: concentration values per IEC61249-2-21.
- All package options are RoHS compliant. For RoHS compliance and environmental information, please visit <a href="http://www.micro-chip.com/pagehandler/en-us/aboutus/">http://www.micro-chip.com/pagehandler/en-us/aboutus/</a> Note 2: ehs.html
- Tape and Reel identifier only appears in the catalog part number description. This identi-Note 3: 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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