LAPIS SEMICONDUCTOR

Cost-Optimized Input/Output Hub (IOH) LSIs For Intel®Atom™processor E600

ML7831; Pin-Compatible to Intel® Platform Controller Hub LSI, EG20T

NEW

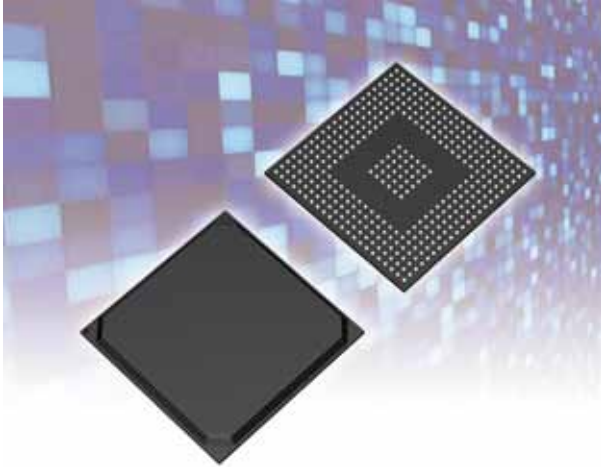## LAPIS Semiconductor

LSI

Product Overview

ML7831 パッケージ：PBGA376

- ● Connects to E600 via PCI Express® x1
- ● Pin-compatible with Intel's® EG20T Platform Controller Hub LSI
- ● Compatible device drivers (except for vendor IDs)
- ● Supports temperature ranges required for industrial applications
- ● Optimized for use with ROHM PMICs (Power Management ICs) and CGICs (Clock Generator ICs) for Intel® Atom™ E600

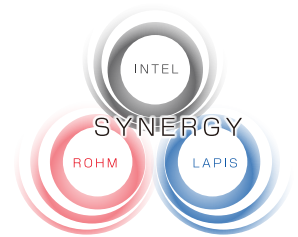| PMIC	5V	BD9591AMWV
	12V	BD9594AMWV
CGIC		BU7335MWV

Major Specification

- ● Operating voltages: 1.2V, 2.5V, 3.3V
- ● Operating Temperature : -40 to +85 ℃
- ● Package: PBGA376
- ● Functions
  - ・PCI Express® 1.1
  - ・USB2.0 Host (HS/FS/LS) with DMA
  - ・USB2.0 Device (HS/FS) with DMA
  - ・SD Host with DMA (supports SDIO; 32GB max.)
  - ・Serial ATA II with DMA
  - ・Gigabit Ethernet MAC with DMA (supports Jumbo Frame)
  - ・8-line UART with 256-byte FIFO
  - ・2-line UART (TXD, RXD) with 64-byte FIFO
  - ・SPI ・I2C ・GPIO

CHOOSE A JUST-FIT IOH FOR BOM REDUCTION*1 !

The ML7831 is an IOH (Input/Output Hub) LSI designed to connect to Intel® Atom™ processor E600 via PCI Express®. LAPIS Semiconductor characterizes the ML7831 as a cost-optimized version to Intel® Platform Controller Hub LSI, EG20T (formerly known as Topcliff) while it still keeps pin-compatiblity to the EG20T.

Not only the pin-compatibility to the EG20T but also common device driver software makes your re-engineering workload as minimized as possible.
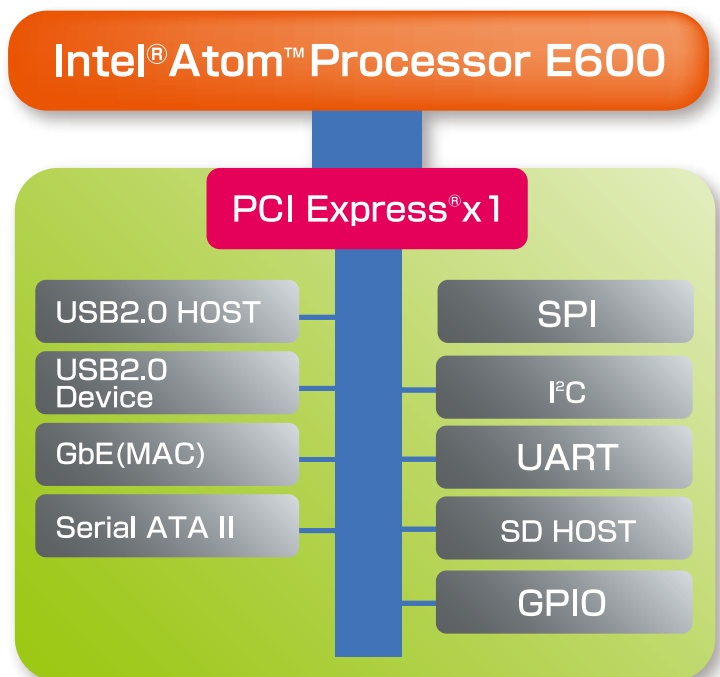
INTEL
SYNERGY
ROHM   LAPIS

*1) Pricing depends on a number of variables, including the order quantity and supply chain. Therefore, specific prices cannot be guaranteed.

Application Examples

・Industrial PC ・Thin Client ・Point-of-Sales ・Digital signage
・FA (Factory Automation) equipment ・And more

Block Diagrams

Intel®Atom™Processor E600

PCI Express®x1

USB2.0 HOST	SPI
USB2.0 Device	I²C
GbE(MAC)	UART
Serial ATA II	SD HOST
	GPIO

For more information, please contact your closest ROHM sales office.

LAPIS Semiconductor Co.,Ltd.

🌐 http://www.lapis-semi.com/en