

# In-Vehicle Infotainment Input/Output Hub (IOH) LSIs For Intel<sup>®</sup> Atom™processor E600

ML7213

# LAPIS Semiconductor

LSI

### Product Overview



### ML7213

#### Package : PBGA404

- Connects to the E600 via PCI Express® x1
- Converts SDVO to digital RGB
- Multiple audio interfaces: 6 x I2S + 2 x TDM
- Supports video input for camera connection
- Wide operating temperature range meets automotive requirements
- Optimized for use with ROHM Power Management ICs (PMIC) and Clock Generator ICs (CGIC) for Intel<sup>®</sup> E600 processors.

PMIC	5V	BD9591AMWV
	12V	BD9594AMWV
CGIC		BU7335MWV

## Major Specification

- Operating voltages: 1.2V, 2.5V, 3.3V
- Operating temperature range: -40C to +85C
- Package: PGBA404
   Functions
- •PCI Express<sup>®</sup> 1.1 x 1
- ·USB2.0 host
- ·USB2.0 host/device switchable
- ·SD host (SDIO)
- ·Serial ATA II
   ·Media LB®
- · Media LB
- •BT656/RAW input
- ·SDVO input/RGB output
- ·UART, SPI, I2C, I2S, TDM (supports McASP) ·GPIO, DMA

## LAPIS Semiconductor Co., Ltd.

%Please note that this is a leaflet, not a data sheet.%Specifications are subject to change without notice.

The ML7213 is an IOH (Input/Output Hub) LSI designed to connect to Intel<sup>®</sup> Atom<sup>™</sup> Processor E600 via PCI Express<sup>®</sup>. The IOH integrates a variety of IOs, such as USB, SATA, SD Card, video input, UART, and I2S, and supports high-speed bus connection to an external FPGA for greater connectivity.

In addition, an SVDO converter is built in, enabling direct connection to RGB panels.

#### Application Examples

In-vehicle infotainment
Car navigation systems
Digital signage
FA (Factory Automation) equipment
Industrial devices
And more



## **Block Diagrams**



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

#### http://www.lapis-semi.com/en

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