S7U4E001A01



Sensing Evaluation Unit E-Series Basic Package

- Epsons AH-6120 high accuracy 6 DOF sensor
- Wireless connection via ZigBee
- Wired connection via USB
- Multiple configurations
- Data Logging capabilities

DESCRIPTIONS

The multifunction sensor evaluation unit the S7U4E001A01 perform a variety of sensing tasks. S7U4E001A01 have a six-axis sensor, which consists of three Epson gyroscopes that provide high accuracy and stability on three axis and a triaxial accelerometer with a dynamic range of ±6 G, a triaxial geomagnetic sensor, and a pressure sensor. This evaluation unit is available with either a ZigBee or a USB interface for easy connection to a PC. This also come with some accessory boards that can be used to freely expand the interfaces and power source for use in an even wider range of evaluation environments.

■ SPECIFICATIONS

Sensors
 6DOF sensor (AH-6120LR) + 3 axis E-Compass + Pressure sensor

- Gyro (3 axis) Range: +/-1000 dps, Sampling frequency: up to 100Hz

- Acceleration (3 axis) Range: +/-6 G, Sampling frequency: up to 100Hz

E-Compass (3 axis)
 Pressure sensor
 Range: 0.6 mT, Sensitivity: 0.3 uT/LSB
 Range: 300 to 1100hPa, Accuracy: +/-300 Pa

Interface
 ZigBee, USB, UART, Micro SD Card (with AAA battery board)

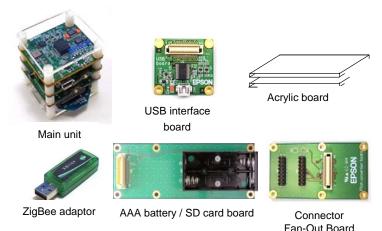
Power supply
 Coin battery (battery life 1H), AAA battery (battery life 20H), USB bus power

Unit size (W x H x T) 40 x 35 x 40 mm

■ EVALUATION KIT

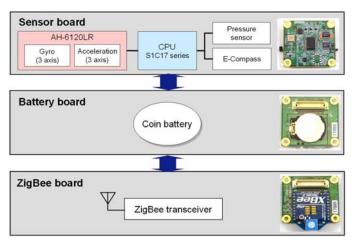
Main Unit (3 boards are assembled)

- Sensor board
- Coin battery board
- ZigBee board
- AAA battery / SD card slot board
- USB interface board
- Connector Fan-Out Board
- ZigBee / USB adaptor
- Acrylic board
- Screws



■ BLOCK DIAGRAMS OF MAIN UNIT





S7U4E001A01

■ EVALUATION by WINDOWS PC

ZigBee / USB adaptor ZigBee S7U4E001A01 Windows PC

Evaluation board/kit and Development tool important notice

- This evaluation board/kit or development tool is designed for engineering evaluation, demonstration, or development purposes only.
 Do not use it for any other purpose. It is not intended to meet the requirements of design for a finished product.
- 2. This evaluation board/kit or development tool is intended for use by an electronics engineer and is not a consumer product. The user should use these goods properly and safely. Seiko Epson does not assume any responsibility or liability of any kind if damage and/or fire is caused by its use. The user should cease to use the evaluation board/kit or development tool when any abnormal issue occurs, even during proper and safe use.
- 3. The part used for this evaluation board/kit or development tool may be changed without any notice.

NOTICE:

No part of this material may be reproduced or duplicated in any form or by any means without the written permission of Seiko Epson. Seiko Epson reserves the right to make changes to this material without notice. Seiko Epson does not assume any liability of any kind arising out of any inaccuracies contained in this material or due to its application or use in any product or circuit and, further, there is no representation that this material is applicable to products requiring high level reliability, such as, medical products. Moreover, no license to any intellectual property rights is granted by implication or otherwise, and there is no representation or warranty that anything made in accordance with this material will be free from any patent or copyright infringement of a third party. This material or portions thereof may contain technology or the subject relating to strategic products under the control of the Foreign Exchange and Foreign Trade Law of Japan and may require an export license from the Ministry of Economy, Trade and Industry or other approval from another government agency.

All brands or product names mentioned herein are trademarks and/or registered trademarks of their respective companies.

©Seiko Epson Corporation 2011, All rights reserved

SEIKO EPSON CORPORATION ______ MICRODEVICES OPERATIONS DIVISION

System Business Development Group Device Sales & Marketing Department

EPSON System products website

http://www.epson.jp/e/products/device/micro_system/

Document code: 412175000 First issue July, 2011