

A²SI-E

Advanced AS-Interface IC

Features

- AS-i Complete Specification V2.11 compliant
- Integrated EEPROM
- Additional addressing channel using an optoelectronic interface
- Extended address mode operation as programmable option (up to 62 slaves)
- High impedance AS-i line input, additional pins for further impedance optimizations
- DC voltage output, approximately 24 volts, not stabilized
- 5 volt DC voltage output, stabilized, CMOS logic can be supplied directly (e.g. µC)
- LED status indicator output (compliant with the standard indication recommendation)
- Integrated watchdog
- Temperature range -25°C to + 105°C

Description

A²SI-E is a monolithic CMOS integrated circuit certified for AS-i (Actuator Sensor-interface) networks. AS-i networks are intended for industrial automation.

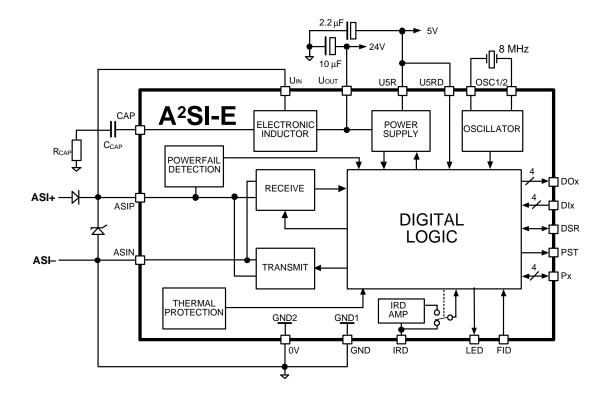
The main advantage of AS-i solutions is that actuators and sensors are connected using a two-wire unshielded cable that is easy to install. This cable transports both power and information/data.

AS-i network communication is based on the master-slave principle. The network can be extended (to cable lengths greater than 100m) by using the A²SI-E in the repeater mode configuration. Furthermore, the A²SI-E is used as slave interface to sensors / actuators and as master interface.

AS-i is a standard for the automation industry based on IEC 62026-2 and EN 50295.

The device is available in a 28-pin SOP (300 mils) package.

Block Diagram



Copyright © 2002, ZMD AG Data Sheet, Rev. 1.2, October 21, 2002 Printed in Germany,

All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. The Information furnished in this publication is preliminary and subject to changes without notice.



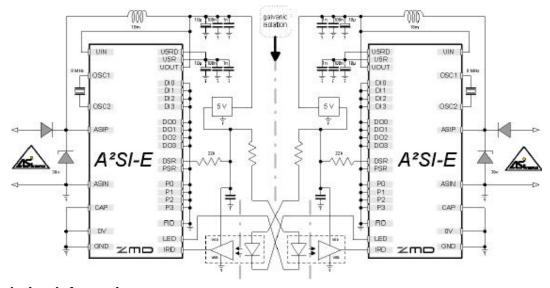


Advanced AS-Interface IC

Application

The A²SI-E is packaged in 28-pin SOP, which exhibits a lower thermal resistance than the 28-pin SSOP package of A²SI IC.

Besides applications that require higher operating ambient temperature than possible with A²SI, A²SI-E accommodates applications which require a higher power dissipation of the integrated circuit. The thermal resistance of the SOP package of the A²SI-E integrated circuit is ideal for master and/or repeater applications.



Ordering Information

Ordering Code	Description	Operating Temperature Range	Package Type	Device Marking	Shipping Form
A2SI-E-ST	Standard version of A ² SI-E	-25°C to 105°C	28-pin SOP (300 mils)	A²SI-E	Tubes (27 parts/tube)
A2SI-E-SR	Standard version of A ² SI-E	-25°C to 105°C	28-pin SOP (300 mils)	A ² SI-E	Tape-and-Reel (1000 parts/reel)
A2SI-E-MT	Pre-programmed master function	-25°C to 105°C	28-pin SOP (300 mils)	A ² SI-E + yellow dot	Tubes (27 parts/tube)
A2SI-E-MR	Pre-programmed master function	-25°C to 105°C	28-pin SOP (300 mils)	A ² SI-E + yellow dot	Tape-and-Reel (1000 parts/reel)

For further information:

ZMD Stuttgart Office Nord-West-Ring 34 70974 Filderstadt- Bernhausen Tel.: +49 (0)711.674.517-0

Fax: +49 (0)711.674.517-99 sales@zmd.de

ZMD AG Grenzstrasse 28 01109 Dresden, Germany Tel.: +49 (0)351.8822.310

Fax: +49 (0)351.8822.337 sales@zmd.de

ZMD America Inc. 201 Old Country Road, Ste 204 Melville, NY 11747

Melville, NY 11747 Tel.: (631) 549-2666 Fax: (631) 549-2882 sensors@zmda.com



All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. The Information furnished in this publication is preliminary and subject to changes without notice.