

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

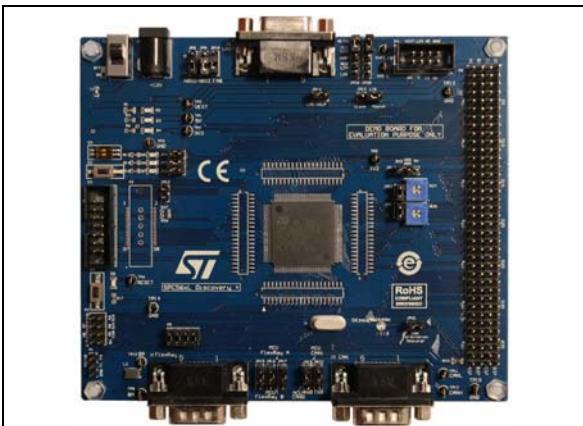
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

SPC56EL70L5DISP: Discovery+ evaluation board

Data brief



Features

- Board Supply: Single 12 VDC external power supply input. Two regulators provide power voltages 5 V and 3.3 V.
- Main power switch and three power supply status LEDs (+12 V, +5 V and +3.3 V)
- All MCU signals accessible by a 37 x 4 100 mil pin grid array allowing connection of an additional board for dedicated applications.
- JTAG interface (7 x 2 male 100 mil connector)
- Two FlexRay channels with jumper enable and DB9 male connector.
- Two CAN channels with jumper enable and DB9 male connector
- K-Line interface.
- Two LIN interfaces (HW configurable)
- Two potentiometers for analog voltage input
- Three user LEDs.
- 40 MHz crystal.
- Reset push button.
- Specification:
 - Board size 115 x 135mm
 - 12 VDC center positive, 2.1 mm inner diameter.

Description

The SPC56xL Discovery+ kit helps you to discover SPC56L line Power Architecture® Microcontrollers with full access to CPUs, I/O signals and peripherals such as CAN, UART, FlexRay, JTAG, K-Line, LIN at budget price.

Free ready-to-run application firmware examples are available on www.st.com/SPC56LDiscovery and inside SPC5Studio (www.st.com/spc5studio) to support quick evaluation and development.

SPC5studio includes visual configurable code generation engine, board support package (BSP), startup routines, interrupt services, free RTOS (optional) and a full set of low level drivers.

SPC5Studio includes Hightec GNU "C" compiler, with a 30-days full free trial license. SPC5Studio is available for free download.

The SPC56xL family is designed to address all Automotive Applications but as well industrial safety oriented applications.

The SPC56xL devices featured specific functions to make the design of ASIL D/SIL-3 applications easier.

An E2E Community is available on ST WEB: <https://my.st.com/public/STe2ecommunities/mcu>.

Table 1. Device summary

Order code	Reference
SPC56EL70L5DISP	SPC56xL DISCOVERY+ with SPC56EL70L5

1 System requirements, HW and SW resources

1.1 System requirements

- Windows PC (2000, XP, Vista)

1.2 Development toolchain

- SPC5Studio (includes Hightec GNU "C" compiler, with a 30-days full free trial license)
- SPC5-UDESTK

1.3 Demonstration software

Demonstration software is preloaded in the MCU flash memory for easy demonstration of the SPC56EL70L5 in stand-alone mode. For more information and to download the latest version available, please refer to www.st.com/SPC56LDiscovery and www.st.com/spc5studio.

2 Revision history

Table 2. Revision history

Date	Revision	Changes
31-Jul-2013	1	Initial release.
25-Sep-2013	2	Updated Disclaimer.

Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

ST PRODUCTS ARE NOT DESIGNED OR AUTHORIZED FOR USE IN: (A) SAFETY CRITICAL APPLICATIONS SUCH AS LIFE SUPPORTING, ACTIVE IMPLANTED DEVICES OR SYSTEMS WITH PRODUCT FUNCTIONAL SAFETY REQUIREMENTS; (B) AERONAUTIC APPLICATIONS; (C) AUTOMOTIVE APPLICATIONS OR ENVIRONMENTS, AND/OR (D) AEROSPACE APPLICATIONS OR ENVIRONMENTS. WHERE ST PRODUCTS ARE NOT DESIGNED FOR SUCH USE, THE PURCHASER SHALL USE PRODUCTS AT PURCHASER'S SOLE RISK, EVEN IF ST HAS BEEN INFORMED IN WRITING OF SUCH USAGE, UNLESS A PRODUCT IS EXPRESSLY DESIGNATED BY ST AS BEING INTENDED FOR "AUTOMOTIVE, AUTOMOTIVE SAFETY OR MEDICAL" INDUSTRY DOMAINS ACCORDING TO ST PRODUCT DESIGN SPECIFICATIONS. PRODUCTS FORMALLY ESCC, QML OR JAN QUALIFIED ARE DEEMED SUITABLE FOR USE IN AEROSPACE BY THE CORRESPONDING GOVERNMENTAL AGENCY.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners.

© 2013 STMicroelectronics - All rights reserved

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan - Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com