

# HD-PLCTM IC SC1320A

Evolving our society to Society 5.0 through stable communication



#### **Overview**

This IC is the latest solution for IoT communication and is embedded with the  $4^{th}$  generation of HD-PLC<sup>TM</sup> core and can provide a secure communication solution for IoT devices over communication cables and power lines. It creates more freedom for innovations while transmitting more data from and to Urban areas, Home, City and Factory environments for further evolving our society to Society 5.0.

#### **Features**

- HD-PLC<sup>TM</sup> core conform to IEEE 1901-2020 is optimized for IoT devices.
- Easy applicable for IoT devices since TCP/IP software stack is included and general interfaces such as UART/SPI are implemented.
- Support is also available for protocols like BACnet, LonWorks for the industrial applications (including building management).
- Adoption of advanced process leads to a compact package size.
- With a compact power circuit design the PCB design and BOM costs can be optimized.
- Stable powerline communication is achieved by the combination of high-quality analog and noise reduction techniques.















<sup>\*</sup> HD-PLC is a trademark or registered trademark of Panasonic Holdings Corporation in Japan and other countries.

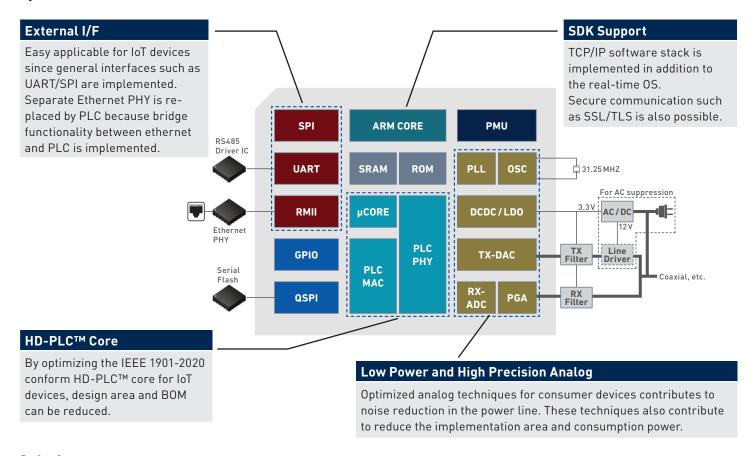
#### **Specifications**

Item	Specification
CPU	Arm® Cortex®-M series
System Clock	125MHz
Flash	Quad-SPI
I/F	SPI/UART/RMII

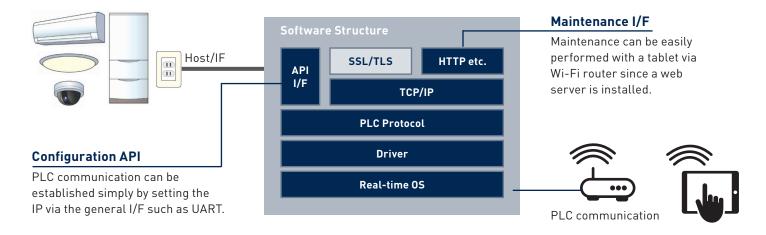
Item	Specification
Supply Voltage	3.3V unity
Package	QFP
Temperature	-40°C to 85°C
Power	200mW (Typ)

<sup>\* &</sup>quot;Arm" and "Cortex" are trademarks or registered trademarks of Arm Limited (or its subsidiaries) in the EU and/or elsewhere.

#### **System Structure**



### Solution



The Products and product specifications described in this document are subject to change without notice for modification and/or improvement.

At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements. All company names, brand names and trademarks herein are property of their respective owners.

## Socionext Europe GmbH

63225 Langen, Germany Tel: +49-6103-3745-312 Email: socionext-plc@eu.socionext.com https://eu.socionext.com

3 Concorde Park, Concorde Road, SL6 4FJ, Maidenhead, UK