

HD-PLC™ LSI SC1320A

- Evolving our society to Society 5.0 through communication utilizing existing power line -



This HD-PLC™* LSI (SC1320A), embedded with the 4th generation of HD-PLC™ core, provides a secure wired communication for IoT devices that can be connected by using the existing infrastructure, the Power Line. It creates more freedom for innovations while transmitting more data from and to Urban areas, Home and Factory environments for further evolving our society to Society 5.0.

*: HD-PLC is a trademark or registered trademark of Panasonic Corporation in Japan and other countries.

■ Features

- The world 1st LSI embedded with HD-PLC™ core conforming to IEEE 1901-2020 (researched on March 2021).
- Easy applicable for IoT devices since the general interfaces such as UART/ SPI and Ethernet MAC (RMII) are implemented.
- Supports are 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.

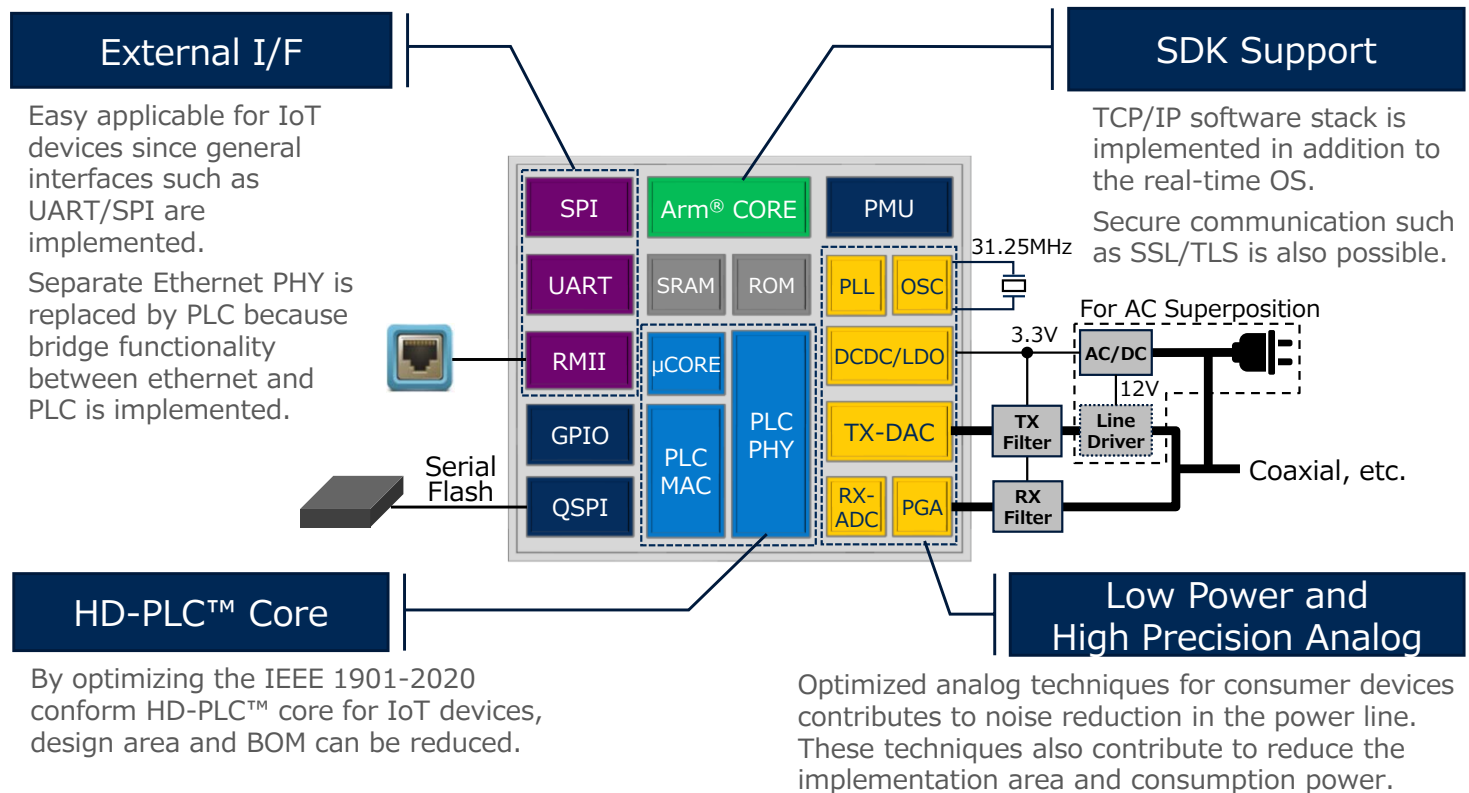


Specifications

Item	Specification	Item	Specification
CPU	Arm® Cortex®-M	Supply Voltage	3.3V unity
System Clock	125MHz	Package	QFN
Flash	Quad-SPI	Temperature	-40°C to 85°C
I/F	SPI/ UART/ RMII	Power	200mW(Typ.)

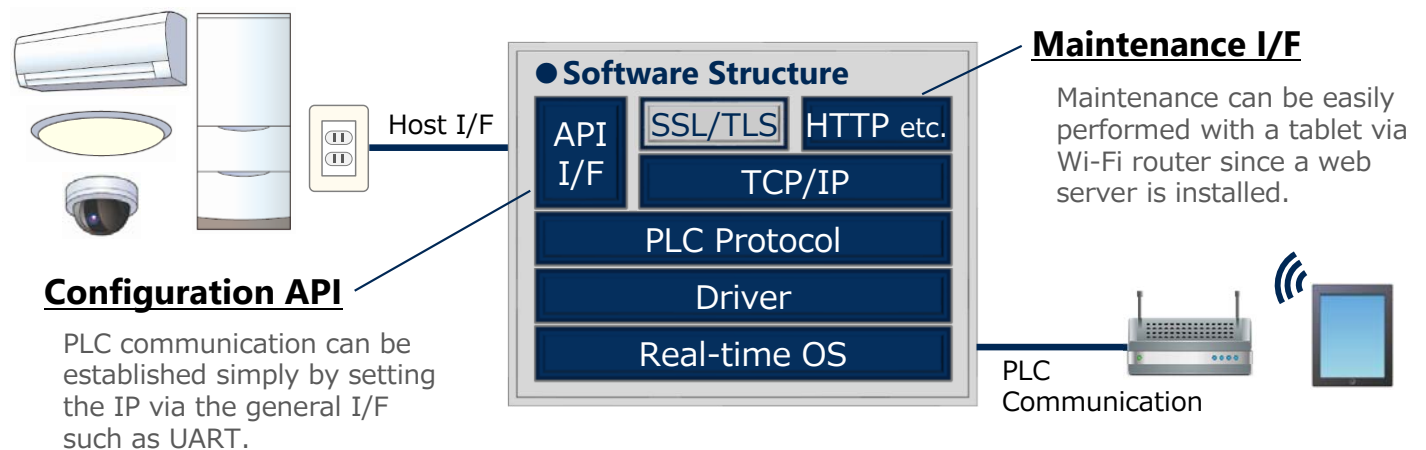
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System Structure



[Notes] PMU: Power Management Unit, DCDC/LDO: DC-DC Converter / Low Drop Out, PGA: Programmable Gain Amplifier

Solution



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