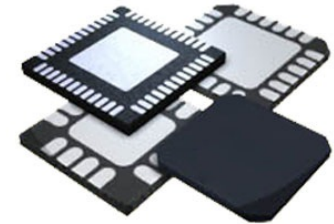


INTERSIL ISLA112P50IRZ Analog to Digital Converter, 12Bit, 500MSPS, Single, 1.7V, 1.9V, QFN

Manufacturers	Renesas Technology Corp
Package/Case	QFN-72
Product Type	Data Conversion ICs
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for ISLA112P50IRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ISLA112P50 is a low-power, high-performance, 500MSPS analog-to-digital converter designed with Intersil's proprietary FentoCharge™ technology on a standard CMOS process. The ISLA112P50 is part of a pin-compatible portfolio of 8, 10 and 12-bit A/Ds. This device an upgrade of the KAD551XP-50 product family and is pin similar. The device utilizes two time-interleaved 250MSPS unit A/Ds to achieve the ultimate sample rate of 500MSPS. A single 500MHz conversion clock is presented to the converter, and all interleave clocking is managed internally. The proprietary Intersil Interleave Engine (I2E) performs automatic fine correction of offset, gain, and sample time skew mismatches between the unit A/Ds to optimize performance. No external interleaving algorithm is required. A serial peripheral interface (SPI) port allows for extensive configurability of the A/D. The SPI also controls the interleave correction circuitry, allowing the system to issue continuous calibration commands as well as configure many dynamic parameters. Digital output data is presented in selectable LVDS or CMOS formats. The ISLA112P50 is available in a 72 Ld QFN package with an exposed paddle. Performance is specified over the full industrial temperature range (-40°C to +85°C).

Features

1.15GHz Analog Input Bandwidth

90fs Clock Jitter

Automatic Fine Interleave Correction Calibration

Multiple Chip Time Alignment Support via the Synchronous Clock Divider Reset

Programmable Gain, Offset and Skew Control

Over-Range Indicator

Clock Phase Selection

Nap and Sleep Modes

Two's Complement, Gray Code or Binary Data Format

DDR LVDS-Compatible or LVCMOS Outputs

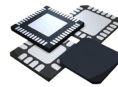
Programmable Test Patterns and Internal Temperature Sensor

Related Products



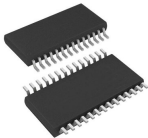
[ISLA214P50IRZ](#)

Renesas Technology Corp
QFN-72



[ISLA216P20IRZ](#)

Renesas Technology Corp
QFN-EP-72



[ISL5857IAZ](#)

Renesas Technology Corp
TSSOP-28



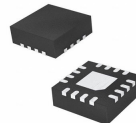
[ISLA224S25IR1Z](#)

Renesas Technology Corp
48pin-QFN



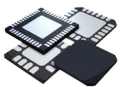
[ISLA224S20IR1Z](#)

Renesas Technology Corp
48pin-QFN



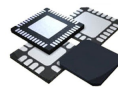
[ISLA224P25IRZ](#)

Renesas Technology Corp
72-VFQFN Exposed



[ISLA224P20IRZ](#)

Renesas Technology Corp
72pin-QFN



[ISLA224P12IRZ](#)

Renesas Technology Corp
72pin-QFN