

Ethernet ICs 3.3V 10/100 BASE TX INTEGRATED PHYCEIVER

Manufacturers	<u>Renesas Technology Corp</u>
Package/Case	SSOP48
Product Type	Interface ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for 1893CFLFT or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.



General Description

The IDT1893C is a low-power, physical-layer device (PHY) that supports the ISO/IEC 10Base-T and 100Base-TX Carrier-Sense Multiple Access/Collision Detection (CSMA/CD) Ethernet standards, ISO/IEC 8802-3. The IDT1893C is intended for MII, Node applications that require the Auto-MDIX feature that automatically corrects crossover errors in plant wiring. The IDT1893C incorporates Digital-Signal Processing (DSP) control in its Physical-Medium Dependent (PMD) sub layer. As a result, it can transmit and receive data on unshielded twisted-pair (UTP) category 5 cables with attenuation in excess of 24 dB at 100 MHz. With this IDT-patented technology, the IDT1893CF can virtually eliminate errors from killer packets. The IDT1893C provides a Serial-Management Interface for exchanging command and status information with a Station-Management (STA) entity. The IDT1893C Media-Dependent Interface (MDI) can be configured to provide either half- or full duplex operation at data rates of 10 Mb/s or 100Mb/s. The IDT1893C shares the same proven performance circuitry with the IDT1893BF and is a pin-for-pin replacement of the 1893BF. **Applications:** NIC cards, PC motherboards, switches, routers, DSL and cable modems, game machines, printers, network connected appliances, and industrial equipment.

Features

Supports category 5 cables with attenuation in excess of 24dB at 100 MHz.

Single-chip, fully integrated PHY provides PCS, PMA, PMD, and AUTONEG sub layers functions of IEEE standard.

10Base-T and 100Base-TX IEEE 802.3 compliant

Single 3.3V power supply

Highly configurable, supports:

Low-power CMOS (typically 400 mW)

Power-Down mode typically 21mW

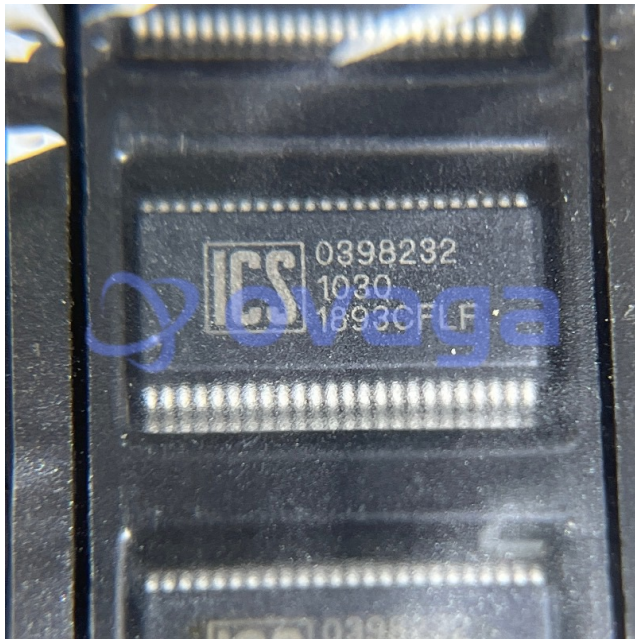
Clock and crystal supported

Fully integrated, DSP-based PMD includes:

Small footprint 48-pin 300 mil. SSOP package

Also available in small footprint 56-pin 8x8 MLF2 package

Available in Industrial Temp and Lead Free



Related Products



[HS1-3182-8](#)

Renesas Technology Corp
DIP16



[HA12187](#)

Renesas Technology Corp
SOP8



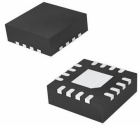
[HA12187FP](#)

Renesas Technology Corp
SOP8



[HS1-3182-9+](#)

Renesas Technology Corp
16-CDIP (0.300, 7.62mm)



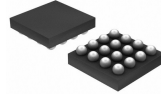
[1894K-32LFT](#)

Renesas Technology Corp
32-VFQFN



[ISL3180EIBZ](#)

Renesas Technology Corp
SOIC-14



[DA7218-00U32](#)

Renesas Technology Corp
34-UFBGA, WLCSP



[1893BFLF](#)

Renesas Technology Corp
SSOP-48