



Data Sheet

#### PHYCEIVER LOW PWR 3.3V 48-SSOP; HT SUSA CODE:8542390000

Manufacturers

Renesas Technology Corp

Package/Case

SSOP-48

Product Type

Interface ICs

Lifecycle

Images are for reference only

Please submit RFQ for 1893BFLF or Email to us: sales@ovaga.com We will contact you in 12 hours.



# **General Description**

The IDT1893BF 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 IDT1893BF is intended for MII, Node applications that require the Auto-MDIX feature that automatically corrects crossover errors in plant wiring. The IDT1893BF 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 100MHz. With this IDT-patented technology, the IDT1893BF can virtually eliminate errors from killer packets. The IDT1893BF provides a Serial-Management Interface for exchanging command and status information with a Station-Management (STA) entity. The IDT1893BF 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.

# **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 8802.3 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



#### ISL3180EIBZ

Renesas Technology Corp SOIC-14



#### **DA7218-00U32**

Renesas Technology Corp 34-UFBGA, WLCSP



### **1893CFLFT**

Renesas Technology Corp SSOP48



#### **HA12187FP**

Renesas Technology Corp SOP8



#### HS1-3182-9+

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



#### 1894K-32LFT

Renesas Technology Corp 32-VFQFN