
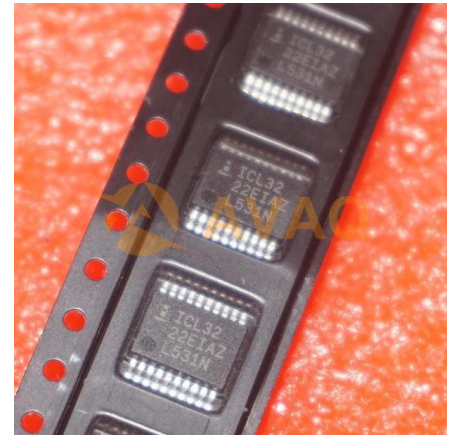


Dual Transmitter/Receiver RS-232 20-Pin SSOP Tube

Manufacturer:	Renesas Technology Corp
Package/Case:	SSOP20
Product Type:	Drivers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The ICL3221, ICL3222, ICL3223, ICL3232, ICL3241, ICL3243 (ISL32xx) devices are 3.0V to 5.5V powered RS-232 transmitters/receivers that meet EIA/TIA-232 and V.28/V.24 specifications, even at VCC = 3.0V. Targeted applications are PDAs, notebook, and laptop computers where the low operational power consumption and even lower standby power consumption are critical. Efficient on-chip charge pumps, coupled with manual and automatic power-down functions (except for the ICL3232), reduce the standby supply current to a 1µA trickle. Small footprint packaging, and the use of small, low value capacitors ensure board space savings as well. Data rates greater than 250kbps are ensured at worst case load conditions. This family is fully compatible with 3.3V only systems, mixed 3.3V and 5.0V systems, and 5.0V only systems.

The ICL324x are 3-driver, 5-receiver devices that provide a complete serial port suitable for laptop or notebook computers. Both devices also include noninverting always-active receivers for “wake-up” capability.

The ICL3221, ICL3223 and ICL3243 feature an automatic powerdown function that powers down the on-chip power-supply and driver circuits. Power-down occurs when an attached peripheral device is shut off or the RS-232 cable is removed, conserving system power automatically without changes to the hardware or operating system. These devices power up again when a valid RS-232 voltage is applied to any receiver input.

Key Features

ESD protection for RS-232 I/O pins to $\pm 15\text{kV}$ (IEC61000)

Drop-in replacements for the MAX3221E, MAX3222E, MAX3223E, MAX3232E, MAX3241E, MAX3243E, and SP3243E

The ICL3221E is a low-power, pin-compatible upgrade for the 5V MAX221E

The ICL3222E is a low-power, pin-compatible upgrade for the 5V MAX242E and SP312E

The ICL3232E is a low-power upgrade for the HIN232E, ICL232, and pin-compatible competitor devices

RS-232 compatible with>

Meets EIA/TIA-232 and V.28/V.24 specifications at 3V

Latch-up free

On-chip voltage converters require only four external $0.1\mu\text{F}$ capacitors at>

Manual and automatic power-down features

Ensured mouse driveability (ICL324xE only)

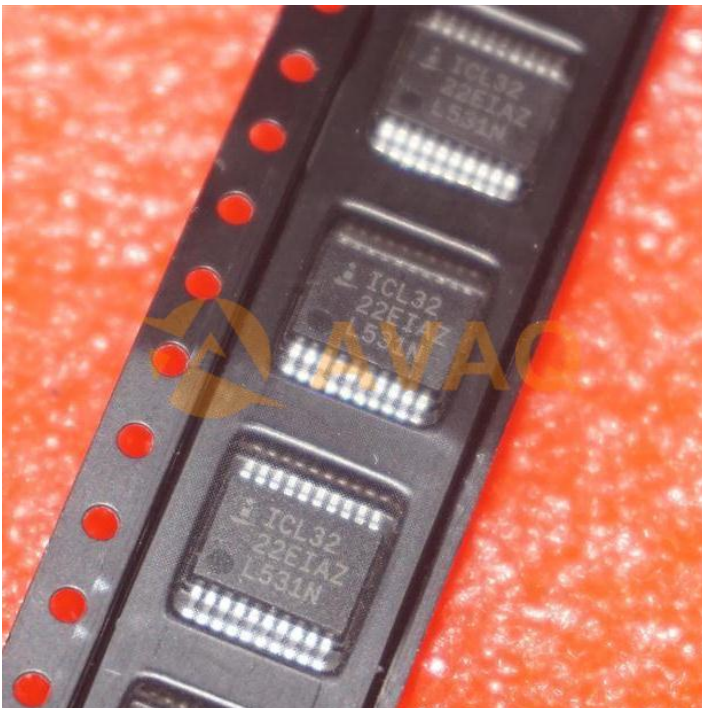
Receiver hysteresis for improved noise immunity

Ensured minimum data rate : 250kbps

Wide power supply range : single +3V to +5.5V

Low supply current in power-down state : $1\mu\text{A}$

Pb-free (RoHS compliant)



Recommended For You

ICL3232CVZ

Renesas Technology Corp
TSSOP16

ICL3225ECAZ-T

Renesas Technology Corp
SSOP20

ICL3222EIAZ-T

Renesas Technology Corp
SSOP20

ICL3222ECAZ-T

Renesas Technology Corp
SSOP20

CP82C37A-5

Renesas Technology Corp
DIP

CA91C142D-33CE

Renesas Technology Corp
BGA

CA91C142D-33CEV

Renesas Technology Corp
BGA

HC55185CIM

Renesas Technology Corp
PLCC28

HIP9011AB

Renesas Technology Corp
SOP20

ISL3174EIUZ

Renesas Technology Corp
MSOP8

82V2044EPFG

Renesas Technology Corp
TQFP-128

CP82C59A-12

Renesas Technology Corp
DIP

HC5515CM

Renesas Technology Corp
PLCC28

HC55185DIM

Renesas Technology Corp
PLCC

IP82C52

Renesas Technology Corp
DIP