

Device Information

ICL232

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+5V Powered, Dual RS-232 Transmitter/Receiver

 Datasheet & Related Docs	 Description	 Key Features	 Parametric Data	 Related Devices
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Ordering Information

 **RoHS/Pb-Free/Green Device**

Part No.	Status	Temp.	Package	MSL	
ICL232CBE	Active	Comm	16 Ld SOIC	1	Buy Sample
ICL232CBET	Active	Comm	16 Ld SOIC T+R	1	Buy
ICL232CBEZ 	Active	Comm	16 Ld SOIC	3	Buy Sample
ICL232CBEZT 	Active	Comm	16 Ld SOIC T+R	3	Buy
ICL232CPE	Active	Comm	16 Ld PDIP	N/A	Buy Sample
ICL232IBE	Active	Ind	16 Ld SOIC	1	Buy Sample
ICL232IBET	Active	Ind	16 Ld SOIC T+R	1	Buy
ICL232IPE	Active	Ind	16 Ld PDIP	N/A	Buy Sample
ICL232MJE	Active	Mil	16 Ld CerDIP	N/A	Buy

The price listed is the manufacturer's suggested retail price for quantities between 100 and 999 units. However, prices in today's market are fluid and may change without notice.

MSL = Moisture Sensitivity Level - per IPC/JEDEC J-STD-020

SMD = Standard Microcircuit Drawing

Description

The ICL232 is a dual RS-232 transmitter/receiver interface circuit that meets all EIA RS-232C and V.28 specifications. It requires a single +5V power supply, and features two onboard charge pump voltage converters which generate +10V and -10V supplies from the 5V supply.

The drivers feature true TTL/CMOS input compatibility, slewrate-limited output, and 300Ω power-off source impedance. The receivers can handle up to +30V, and have a 3kΩ to 7kΩ input impedance. The receivers also have hysteresis to improve noise rejection.

Key Features

- Meets All RS-232C and V.28 Specifications
- Requires Only Single +5V Power Supply
- Onboard Voltage Doubler/Inverter
- Low Power Consumption
- 2 Drivers
 - $\pm 9V$ Output Swing for +5V Input
 - 300Ω Power-off Source Impedance
 - Output Current Limiting
 - TTL/CMOS Compatible
 - $30V/\mu s$ Maximum Slew Rate
- 2 Receivers
 - $\pm 30V$ Input Voltage Range
 - $3k\Omega$ to $7k\Omega$ Input Impedance
 - 0.5V Hysteresis to Improve Noise Rejection
- All Critical Parameters are Guaranteed Over the Entire Commercial, Industrial and Military Temperature Ranges
- Pb-Free Plus Anneal Available (RoHS Compliant)

Related Documentation

DS Datasheet(s):

- [+5V Powered, Dual RS-232 Transmitter/Receiver](#)

TH Technical Homepage:

- [Interface Ics](#)
- [RS-232 Interface Ics](#)

PT Parametric Data

# of Tx	2
# of Rx	2
High ESD	No
Manual Shutdown	No
Auto Shutdown	No
Rx Disable	No
Data Rate (kbps)	120
Cap. Value (μF)	1
I_{CC} Enabled (mA)	5
I_{CC} Disabled (μA)	N/A
V_{CC} Range (+V)	4.5 to 5.5

Applications

- Any System Requiring RS-232 Communications Port
 - Computer - Portable and Mainframe
 - Peripheral - Printers and Terminals
 - Portable Instrumentation
 - Modems
- Dataloggers

RD Related Devices

PT [Parametric Table](#)

<u>HIN202</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN206</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN207</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN208</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN211</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN213</u>	+5V Powered RS-232 Transmitters/Receivers' with 0.1Microfarad External Capacitors
<u>HIN232</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN236</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN237</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN238</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN239</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN240</u>	+5V Powered RS-232 Transmitters/Receivers
<u>HIN241</u>	+5V Powered RS-232 Transmitters/Receivers