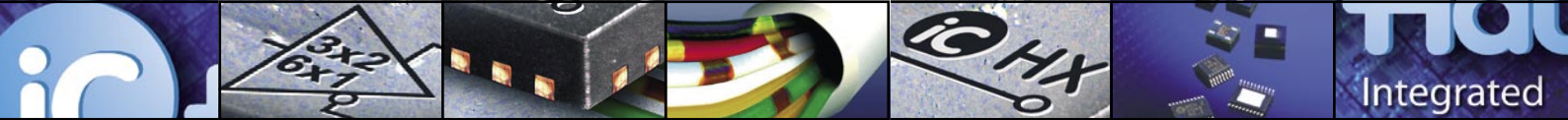


# iC-HX 3-CHANNEL DIFFERENTIAL LINE DRIVER



iC-HX is a RS422 to 24 V line driver featuring a power reduction circuit recycling reflected energy from non-terminated lines.

An internal switch is used to transfer residual energy to and from externally connected capacitors. This xSWITCH mode is active when pin NXS is set to low. In the non-active mode (NXS=high), the iC-HX is fully functional and pin-compatible to iC-DL.

## Applications

- 24 V control engineering
- Line driver in a PLC environment
- Linear and rotary encoders
- MR sensor systems

## Features

- Novel power loss reduction mode extends 24 V line driving capabilities
- 6 current-limited push-pull drivers
- Differential 3-channel operation
- Power supply range from 4 to 36 V
- Integrated 75  $\Omega$  line adaptation
- Low output saturation voltage
- Compatible with TIA/EIA standard RS-422
- Tristate switching enables use in buses
- Short switching times and high slew rates
- Schmitt trigger inputs compatible with TTL and CMOS levels, voltage-proof up to 36 V
- Thermal shutdown with hysteresis
- Open-drain error output with thermal shutdown / undervoltage
- Footprint compatible to iC-DL

