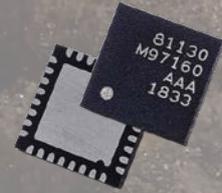


MLX81130

MULTI CHANNEL OLED DRIVER

ANIMATED & STATIC



Hermisenda opalescens is a species of brightly coloured sea slug or nudibranch, a marine gastropod mollusc in the family Facelinidae. This species is commonly known as the 'opalescent sea slug' and represents our intelligent OLED/LED controllers.

PROGRAMMABLE MULTI CHANNEL OLED CONTROLLER ENABLES RLC ANIMATION

MLX81130

The MLX81130 is a fully integrated smart automotive OLED driver with high-speed robust communication MeLiBu[®] between multiple LED drivers, making it the best suit for applications such as Rear Combination Lamp (RCL) and small OLED displays. The MLX81130 integrates all the components needed to drive up to 25 OLEDs with their current regulated and programmed up to 30mA (per channel). For even more current, it is possible to bridge outputs. Coming in a QFN32 5x5 package, it provides a communication interface allowing the development of powerful and cost-optimized animated light systems. ASIL-B grade applications are supported thanks to the MeLiBu[®] communication system.

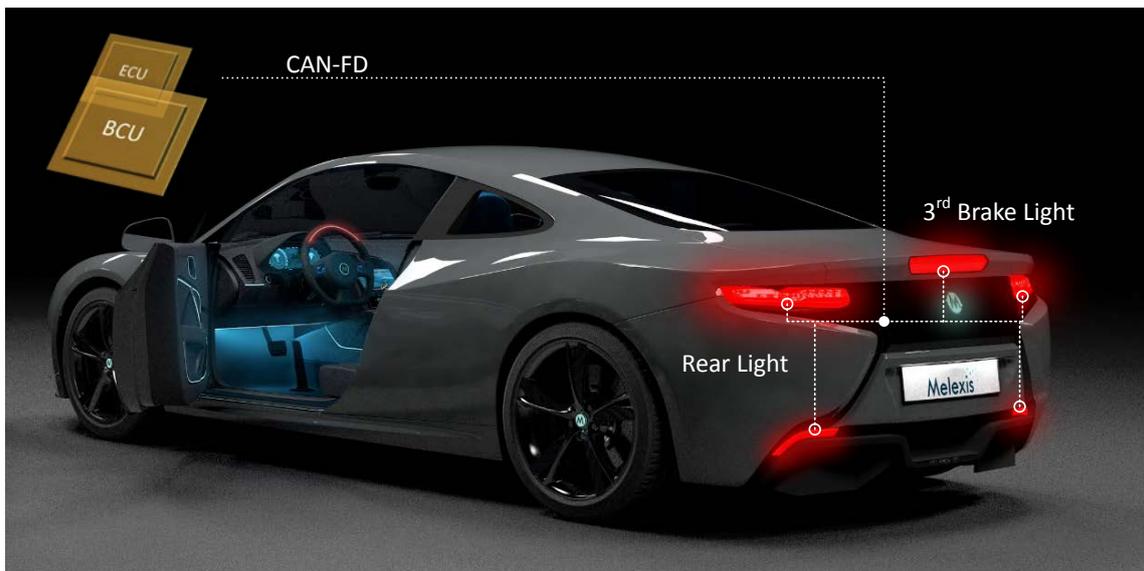
KEY FEATURES

- ✓ 25 OLED drivers programmable up to 30 mA per channel:
 - Driver bridging for higher current
- ✓ MeLiBu[®] communication interface:
 - MeLiBu[®] protocol controller with DMA access
 - Extended UART with autosynchronisation of baud rate
 - Baud rate up to 2Mbit
 - Auto addressing via standard pins in daisy chain
- ✓ 5.5 - 18 V supply voltage (40 V proof)
- ✓ 8-bit intensity control
- ✓ Storage of OLED calibration data directly within OLED driver
- ✓ High side programmable calibrated current sources for OLED control
- ✓ Direct OLED drive without additional external components
- ✓ OLEDs fully diagnosable (Short circuit, broken line, threshold monitor)
- ✓ Real-time update of OLEDs without delay
- ✓ Operating temperature from -40°C to 125°C
- ✓ ASIL B classification
- ✓ AECQ-100
- ✓ Memory:
 - 32 KB Flash
 - 2 KB RAM
 - 512 B EEPROM
 - System ROM
- ✓ QFN32 5x5 package, 32 pins

KEY APPLICATIONS

- ✓ Animated/Static interior and exterior lights
- ✓ Rear Combination Lamp (RCL)
- ✓ Small OLED display

APPLICATION VISUAL



25 OLEDs
30mA/channel

String of multiple LEDs
25 channels
30mA/channel

- Driver bridging for higher current
- Diagnostics



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