

## 16-Channel Constant Current LED Sink Driver with Silent Error Detection and Current Gain

## **Features**

- 16 constant-current output channels
  Constant output current range: 3~90mA
  - 8-90mA @ 5V supply voltage
  - 3-70mA @ 3.3V supply voltage
- In-message error detection
  - Both open-circuit and short-circuit LEDs can be detected
  - On-the-fly error detection
  - Data-in, error-out; both errors are merged and coded with zeros
- Compulsory error detection
  - Full panel, data independent
  - Silent error detection with 0.25mA in 700ns
- Settable threshold voltage for LED short-circuit detection
- Thermal detection
  - Over-temperature report (e.g. temp.>150 °C)
- 64-step programmable current gain: from 12.5% to 200%
- Excellent output current accuracy,
  - Between channels: <±1.5% (typ.), and
  - Between ICs: <±3% (typ.)
- Fast response of output current
  - Min. output pulse width of OE:35ns with good uniformity between output channels
- Staggered delay of output, preventing from current surge
- 30MHz clock frequency
- Schmitt trigger input

