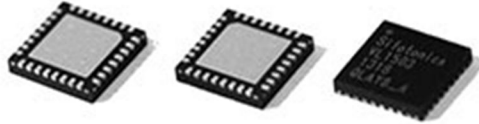




## VL1503

### 10Gb/s VCSEL Driver + Limiting Amplifier

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VL1503 is a highly-integrated 10Gb/s VCSEL driver (VD), limiting amplifier (LA) for fiber channel and SFP+ applications. VL1503 also integrates an 8051-core MCU, ADC, Temperature Sensor, and an internal 1M-bit self-programmable flash memory for realizing all the digital diagnostic monitoring (DDM) functions in SFF-8472.

#### Features:

- 10Gbps VCSEL driver up to 24mA modulation current and 24mA bias current
- Closed or open loop bias mode
- Laser safety feature included
- 10Gbps limiting amplifier
- Adjustable LA LOS threshold
- Digitally adjustable LA output voltage from 200 mV to 850 mV
- Selectable LA output pre-emphasis
- Adjustable LA output cross point
- Low power consumption
- Internal squelching function to disable LA output
- Output polarity control
- Integrated 8051-Core MCU
- Integrated 1M-bit flash memory and 16K bytes SRAM
- I<sup>2</sup>C slave interface
- JTAG (IEEE std.1149.1) interface
- Integrated 12-bit ADC
- Integrated temperature sensor
- Single +3.3V supply
- 5mm×5mm 32-Pin QFN package

#### Applications:

- 10G Ethernet
- SFP+ optical receiver modules
- Fiber channel
- SONET OC-192