

3-Channel Laser Diode Driver + Oscillator



The EL6216 is a high-performance three channel laser driver that provides controlled current to a grounded laser

diode. Write channels 2 and 3 should be used as the write channels, with switching speeds of approximately one nanosecond rise/fall time. All three channels are summed together at the I_{OUT} output, allowing the user to create multilevel waveforms in order to optimize laser diode performance. The level of the output current is set by an analog voltage applied to an external resistor which converts the voltage into a current at the I_{IN} pin (virtually ground). The current seen at this pin is then amplified to become a current source at pin I_{OUT} .

An on-chip 500MHz oscillator is provided to allow output current modulation when in any mode. This is turned on when the OSCEN pin is held high. Complete control of amplitude and frequency is set by two external resistors connected to ground at pins R_{FREQ} and R_{AMP} (see graphs in this data sheet for further explanation).

Ordering Information

PART NUMBER	PACKAGE	TAPE & REEL	PKG. DWG. #
EL6216CU	24-Pin QSOP	-	MDP0040
EL6216CU-T7	24-Pin QSOP	7"	MDP0040
EL6216CU-T13	24-Pin QSOP	13"	MDP0040

Features

- Voltage-controlled output current source requiring one external set resistor per channel
- Rise time = 0.8ns
- Fall time = 0.8ns
- On chip oscillator with frequency and amplitude control by use of external resistors to ground
- Oscillator to 500MHz
- Oscillator to 100mA_{PK/PK}
- Single +5V supply (±10%)
- Disable feature for power-up protection and power savings

Applications

- CD-RW applications
- Writable optical drives
- Laser diode current switching

Get FULL DATASHEET

All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9000 quality systems.
Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality

Intersil products are sold by description only. Intersil Corporation reserves the right to make changes in circuit design, software and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by Intersil is believed to be accurate and reliable. However, no responsibility is assumed by Intersil or its subsidiaries for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Intersil or its subsidiaries.

For information regarding Intersil Corporation and its products, see www.intersil.com