

ScaleFeatures

- Complete programmable laser diode driver
- 250mA write + 100mA read
- 8bit x 8bit multiplying DAC output provides 8bit full scale adjustment and 8bit resolution at any full scale output
- 120pS timer resolution
- Two laser outputs allows read/write DVD and CD combinations
- Programmable waveform values support CD-R, CD-RW, DVD-RAM, DVD R, DVD RW
- Two analog inputs support slope and read APC
- HFM oscillator programmable to 100mA_{P-P} from 200MHz to 500MHz
- PLL allows reduced-frequency clock on flex cable
- Separate serial input works up to 25MHz
- Dual sampled IV amplifier with programmable sample select and gain
- Programmable HFM offset when HFM is off

Applications

- Combination DVD writable and CD writable drives
- DVD camcorders
- DVD video recorders

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL6295CL	38-Pin LPP		MDP0046

General Description

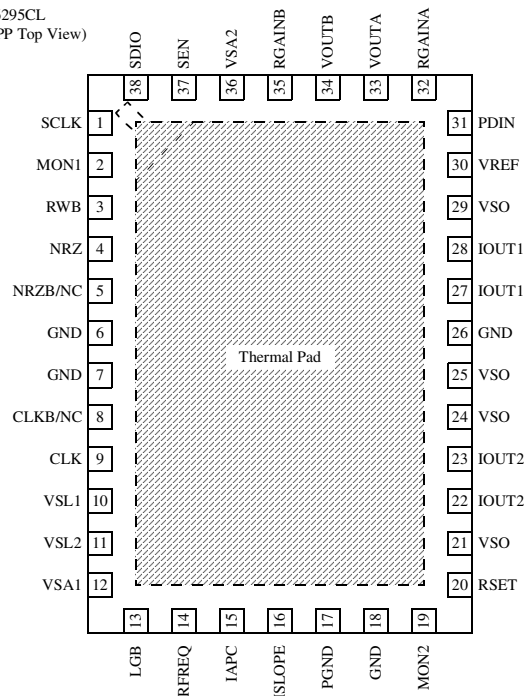
The EL6295C is a highly integrated laser diode driver designed to support multi-standard writable optical drives. It has a write strategy generator included. The part also has an IV amplifier with concurrent read and write sampling. The gains of the IV amplifier are programmable, eliminating the need for gain DAC's .

The architecture allows reprogramming of the timers to support different media, DVD or CD standards, and different speeds. The programming is accomplished through a serial interface port. Two outputs are provided to support dual-laser multi-standard optical heads. The clock and NRZ inputs can be either standard CMOS or LVDS, selectable through a program bit.

The EL6295C operates on a 5V supply for analog circuits, and a 3.3V supply for digital circuits. The EL6295C is available in a 38-pin LPP package for improved thermal performance and reduced board area usage. It is specified for operation over the full -40°C to +85°C temperature range.

Connection Diagrams

EL6295CL
(38-Pin LPP Top View)



Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.

EL6295C - Product Brief

Laser Diode Driver with Waveform Generator

General Disclaimer

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HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

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