

élantec
HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

EL6281C - Product Brief

4-Channel Laser Driver with APC Amp

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Features

- Read + 3 Write Channel laser driver with oscillator & fast I/V amplifier
- Rise time = 0.8 nsec
- Fall time = 0.8 nsec
- 200V/ μ s I/V amplifier
- 100X gain, 100mA low noise read channel
- 200X gain, 200mA write channel
- Two 100X gain, 100mA write channels
- 500MHz, 100mAp-p Oscillator with dual frequency and amplitude control
- 3.3V compatible logic signals
- Single +5V supply

Applications

- CD-RW to 16X
- CD-R to 32X
- Writable Optical Disk Drives

Ordering Information

Part No.	Temp. Range	Package	Outline #
EL6281CU	0°C to +70°C	QSOP-24	MDP0040
EL6281CL	0°C to +70°C	LPP-24	MDP0046

General Description

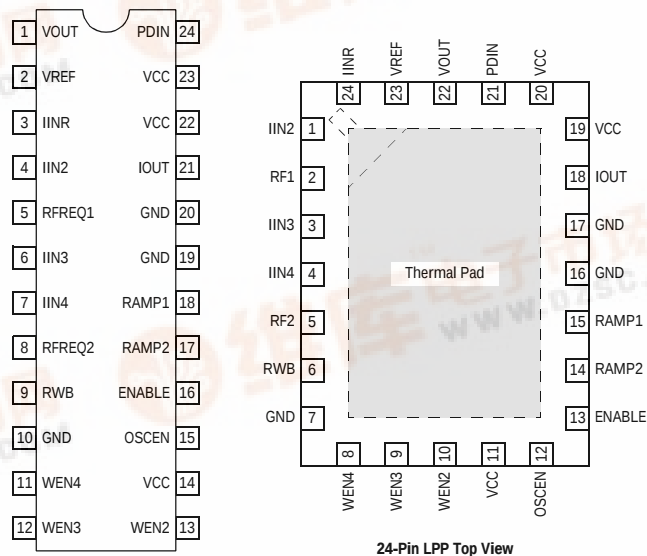
The EL6281C is a combination read + 3 write level laser driver with IV amplifier. A dual amplitude, dual frequency RF oscillator sums on the output for laser noise reduction during read or write. All these functions are provided in 24-lead QSOP and LPP packages.

The ENABLE pin enables the read & write channels. Positive current supplied to the IIN lines, through user selected resistors, allow the full scale range of each amplifier to be matched to the full scale range of the users control DACs. When the WEN pins are switched low, the respective current is summed to the output with 1ns rise and fall times.

The 100mAp-p (max) oscillator is switched on and off by the OSCEN line. The R/W line allows the oscillator to operate at one amplitude and frequency when R/W is high, and another amplitude and frequency when R/W is low.

The entire chip is powered down when ENABLE is low. The user can calibrate the gain of the I/V amplifier. With a slew rate around 200V/ μ s, the I/V amplifier can normally settle to less than 1% within 30ns.

Connection Diagram



October 25, 2001

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.

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General Disclaimer

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