CW LASER DIODE DRIVER
FOR 14-PIN BUTTERFLY PACKAGED DEVICES

Release: V1.0 | Author: MM | Date: 12/05/2016

MODEL NO

CW14pinButterflyDriver1500

DESCRIPTION:

The CW14pinButterflyDriver is a board level constant current laser diode driver and thermoelectric cooler (TEC) controller. It offers overshoot-free fast settling PID control, and protection against reverse or over voltage. Temperature and current limit is set by onboard trimmers.
The operation current and temperature can be set via USB interface with dedicated GUI software application.
An RS232 interface onboard add-on is also included.

SPECIFICATIONS, CW14PINBUTTERFLYDRIVER

Parameter	Specification	Unit
Current output	up to 1500	mA
Risetime	100	us
Overshoot	< 2	%
TEC max cooling/heating current	1.5	A
Supply voltage	3-5V	V
Board Dimensions	64 x 90	mm

COMPATIBLE 14-PIN BUTTERFLY PACKAGED PIN OUT (LASER NOT INCLUDED)

Pin	Description	Pin	Description
1	Peltier cooler (+)	8	NC
2	Thermistor	9	NC
3	Monitor anode	10	Laser anode
4	Monitor cathode	11	Laser cathode
5	Thermistor	12	NC
6	NC	13	GND
7	NC	14	Peltier cooler (-)

(*) for different device pinout please contact MWTech

APPLICATIONS

- Driver 14-pin & 10-pin butterfly packaged Laser Diodes, SLD's and SOA's
- Laboratory setups
- Concept demonstrators
- Product integration

KEY FEATURES

- Small form factor
- No overshoot
- USB & RS232 interfaces
- Integrated TEC controller

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CONNECTORS

J1 CONTROL AND POWER CONNECTOR, MOLEX 87831-2020

Pin	Description	Pin	Description
1	Supply	11	EN_ext , Enable pin
2	Supply	12	GND
3	PDout ,amplified monitor output	13	NC
4	Iset_ext , leave none connected	14	GND
5	GND	15	GND
6	GND	16	RS232 IN (connects to com port DB9F-3)
7	NC	17	GND
8	NC	18	RS232 OUT (connects to com port DB9F-2)
9	GND	19	OverTemp , overtemperature active low
10	GND	20	GND

J2 microUSB Amphenol FCI 10118192

Pin	Description
1	V BUS 5V USB power, supplies USB to UART IC
2	Data minus
3	Data plus
4	ID, 51K to GND
5	USB GND, connected to GND with 27R

J3 POWER CONNECTOR

Pin	Description
1	GND
2	Supply