

CW LASER DIODE DRIVER, WITH SOCKET FOR 14-PIN BUTTERFLY PACKAGED DEVICES

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

MODEL NO

# CW14pinButterflyDriver1500[ZIF]

### **DESCRIPTION:**

The CW14pinButterflyDriver[ZIF] is a board level constant current laser diode driver and thermoelectric cooler (TEC) controller, with a socket to avoid the need for soldering the devices. 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	А	
Supply voltage	3-5V	V	
Board Dimensions	85 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 (-)	

<sup>(\*)</sup> for different device pinout please contact MWTech

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

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

### **DRIVERS AND CONTROLLERS**



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#### **CONNECTORS**

JI 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	