

iC-HG/HG30 iCSY HG21M

HIGH-SPEED MODULE FOR SMD VCSEL ARRAYS

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ORDERING INFORMATION

| Type | Package | Options | Order Designation |
|---------|---------|---------|--------------------|
| iC-HG | HG21M | - | iC-HG iCSY HG21M |
| iC-HG30 | HG21M | - | iC-HG30 iCSY HG21M |

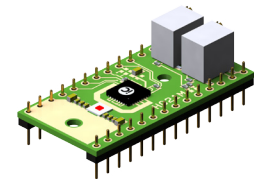


Figure 1: HG21M Package (DIL28)

PIN CONFIGURATION

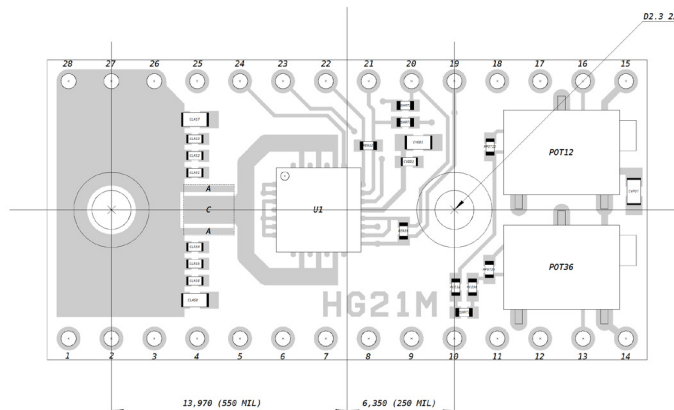


Figure 2: Top view / Dimensions in mm

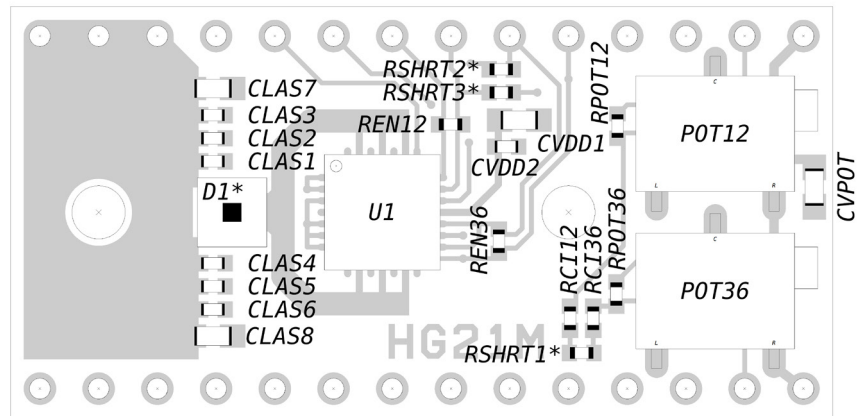
| No | Name | Function | No | Name | Function |
|----|--------|----------------------------|----|--------|----------------------------|
| 1 | GND | Ground, Analog Ground | 15 | POTVDD | Potentiometer 12 36 VDD |
| 2 | GND | Ground, Analog Ground | 16 | RC12 | Current Control Voltage 12 |
| 3 | GND | Ground, Analog Ground | 17 | POTGND | Potentiometer 12 36 GND |
| 4 | GND | Ground, Analog Ground | 18 | POTGND | Potentiometer 12 36 GND |
| 5 | nc | not connected | 19 | EN46 | Input Channel 4 + 6 |
| 6 | nc | not connected | 20 | EN35 | Input Channel 3 + 5 |
| 7 | nc | not connected | 21 | EN2 | Input Channel 2 |
| 8 | nc | not connected | 22 | EN1 | Input Channel 1 |
| 9 | nc | not connected | 23 | ELVDS | TTL/LVDS Input Selector |
| 10 | nc | not connected | 24 | NER | Error Monitor Output |
| 11 | nc | not connected | 25 | VDD | Supply Voltage |
| 12 | nc | not connected | 26 | LDA | Anode Laser Diode |
| 13 | RC136 | Current Control Voltage 36 | 27 | LDA | Anode Laser Diode |
| 14 | POTVDD | Potentiometer 12 36 VDD | 28 | LDA | Anode Laser Diode |

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SMD POSITIONS



* Devices are not assembled

Figure 3: SMD Positions

NOTE: Module must be baked (min. 24 h at 100 °C) before exposing to high temperature processes (e.g. reflow soldering) to avoid delamination, PCB/VIA damages, and popcorning.

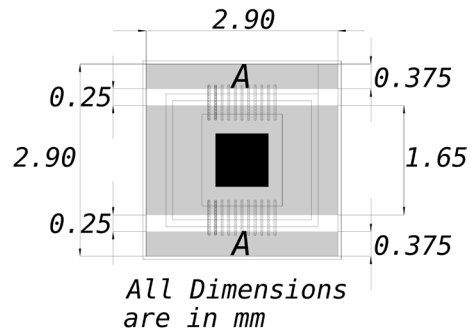


Figure 4: Details of the VCSEL pad

ABSOLUTE MAXIMUM RATINGS

| Item No. | Symbol | Parameter | Conditions | Min. | Typ. | Max. | Unit |
|----------|--------|-------------------------------------|------------|------|------|------|------|
| TG1 | Ta | Operating Ambient Temperature Range | | -20 | | 85 | °C |
| TG2 | Ts | Storage Temperature Range | | -20 | | 85 | °C |

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SCHEMATICS

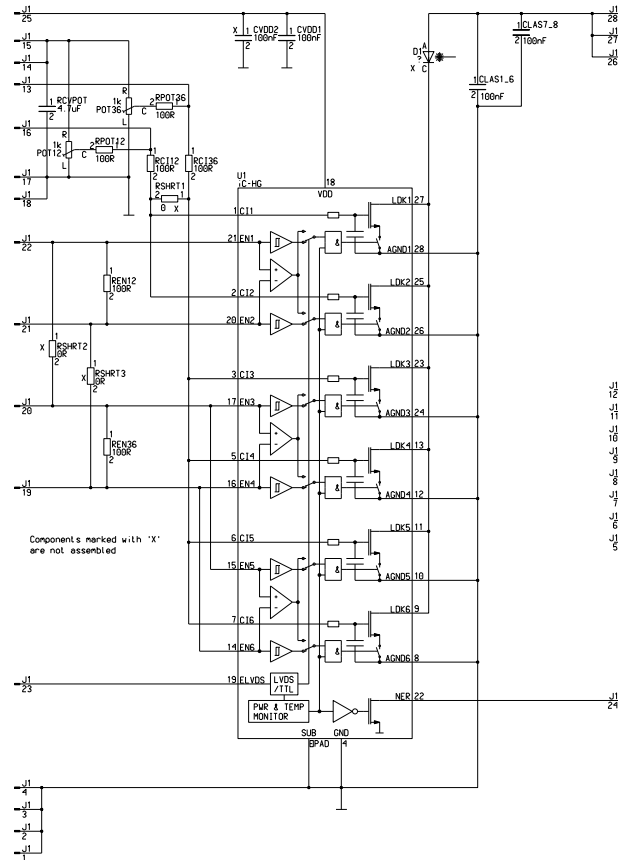


Figure 5: Circuit diagram

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