PSS MBS series

Optical Module Burn-in System

Product Introduction

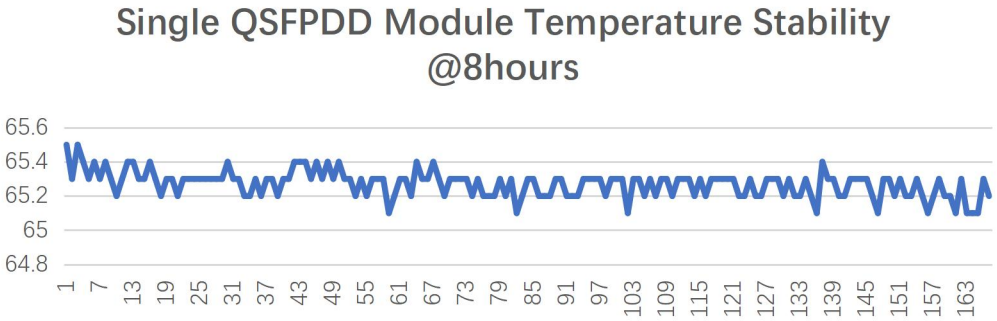
PSS 12016/22016/32016, an integrated burn-in system for optical modules, is used for burn-in and screening and reliability analysis of optical modules. The system provides a constant voltage of 3~4V and a high temperature burn-in condition of up to 120℃. At the same time, the working current, voltage and working environment temperature of the module are monitored and tested in real time, and the failure judgment is automatically made. Real-time storage of monitoring data is supported for tracing burn-in failure modules, and recording module voltage, temperature, bias current, transmit power and receive power through DDM.

Product Application

- Support on-line burn-in screening (packaging is extensible) for modules of package types such as XFP, SFP+, SFP-Combo, SFP-DD, CFP, QSFP+, QSFP-DD and OSFP.
- COB burn-in screening supporting multi-class encapsulation.
- Support the strict requirements of high-speed module product testing.

Product Features

- The maximum current of the whole board 24A is provided for the optical module or COB product.
- High-power burn-in supports water cooling solution
- High integration and high reliability, which is suitable for the burn-in process and reliability verification process of large-scale manufacturing of modules or COB products.



- The incubator has two independent temperature zones, and supports the burn-in operation of many different products at the same time, with uniform temperature distribution and small module temperature difference.
- Support current limiting protection, real-time protection of products, module power on and off, burn-in board hot plug EOS function is perfect.

- Support real-time monitoring module and DDM of COB products to record voltage, temperature, bias current, transmit power, receive power, etc.
- Support register writing of module and COB before burn-in (burn-in mode), and single product register debugging function.
- The burn-in board is designed separately, and the QSFP and QSFPDD seats are separated into small boards, which is convenient for maintenance.
- Real-time data storage, no need to worry about data loss caused by accidental power failure.

Technical Parameter

Parameter	Description/Value		
Product model	MBS12016	MBS22016	MBS32016
Number of independent temperature zones	two		
Number of test channels	1008*2 (Maximum 2016 channels, refer to product type, size and power consumption, select different types of burn-in boards and channels)		
Bin size	Single bin supports 3*12 burn-in boards.	Single bin supports 6*6 burn-in boards.	
Module package support	Support XFP, SFP, QSFP, QSFP-DD, OSFP and other packages (the package is extensible).		
Voltage output range	3~4V		
Voltage monitoring	3~4V		
Current limiting range	0~4A		
Current monitoring	0~4A		
Maximum current of single board @3.3V	12A	12A	24A
I2C DDM data reading	Support 8472 protocol, 8436 protocol and cmis4.0 protocol (extensible)		
Overcurrent protection	Software configurable		
temperature range	RT+30℃ ~ 120℃ (no-load)		
Temperature accuracy	±2℃		
Temperature uniformity [air]	Full load ≤ 3℃, no load ≤ 2℃		
Long-term temperature stability	±1℃		
Heating rate	> 2℃/min		
database	Real-time local storage, docking database		
power consumption	≤10kW (peak power consumption of equipment in heating-up stage, excluding products)		
Size (width * height * depth)	1620*1850*1450(mm)	1700*1900*1300(mm)	