

LPO MSA Diagnostics Overview



Diagnostic Feature	DAC	LPO	Retimed (DSP)
Tx LOS	N/A	Yes	Yes
Tx Output Disable	Yes, via Host ASIC	Yes	Yes
Tx Optical Output	N/A	Yes	Yes
Laser Bias Flags	N/A	Yes	Yes
Rx LOS	Yes, via Host ASIC	Yes	Yes
Rx Optical Input	N/A	Yes	Yes
Module Temp / Voltage	N/A	Yes	Yes
Tx & Rx LOL	N/A	N/A (no retiming in Module)	Yes (retimers have LOL events)
Segmented SNR / FEC Statistics	No	No	Yes
End-End Link SNR/FEC/S21 Statistics	Yes	Yes	No
Media SNR	Yes, via Host ASIC	Yes, from Host ASIC	Yes, Segmented
Media FEC Statistics	Yes, via Host ASIC	Yes, from Host ASIC	Yes, Segmented
MPI Detection (Optical Reflections)	N/A	Yes, from Host ASIC	Yes, Segmented
Signal Loopback	No	No	Yes
PRBS Gen/Check	Yes, via Host ASIC	Yes, from Host ASIC	Yes, Segmented