MEMS MXN Single Mode Optical Cross Connect Switch OXC

Description:

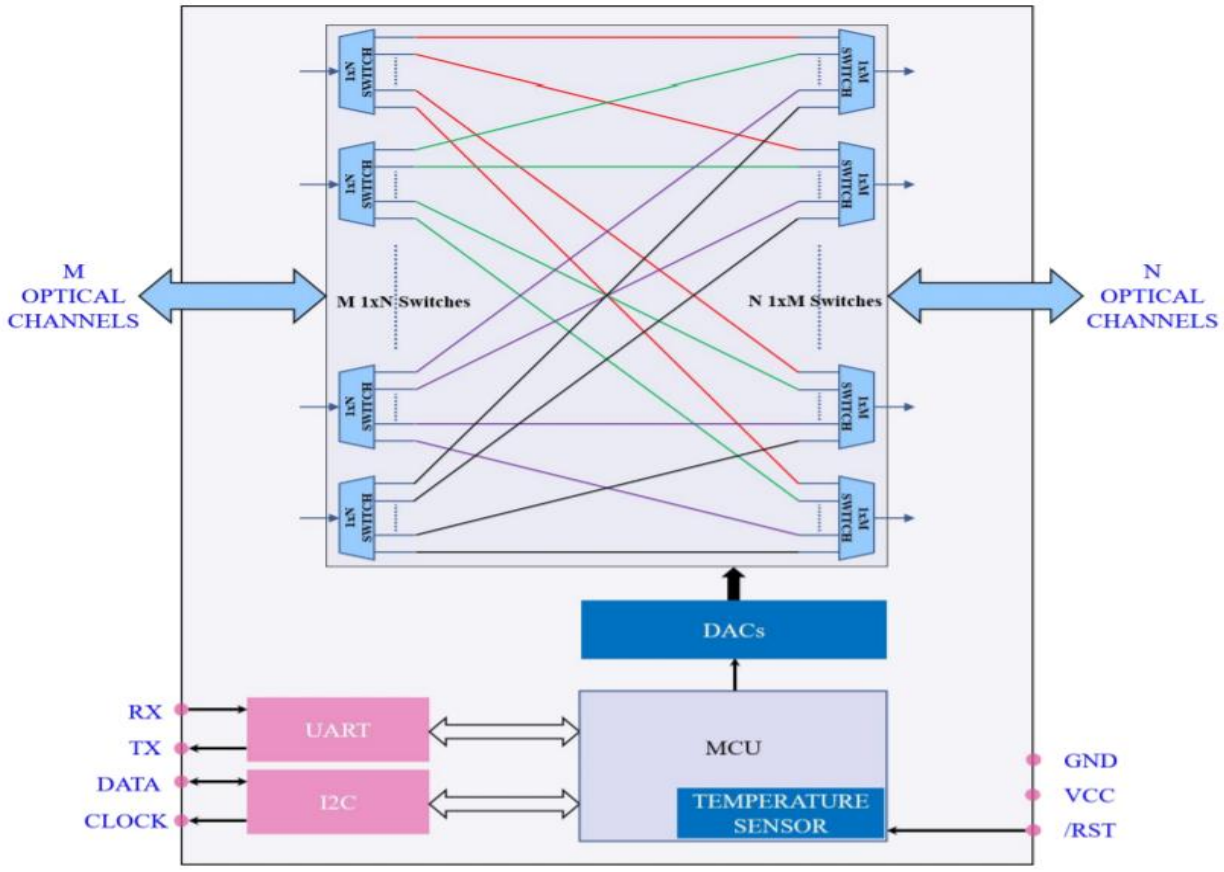
MEMS optical cross-connect switch is Matrix Optical Switch that allows the simultaneous connection of multiple input to output fibers in a fully non-blocking, all-optical, cross-connect configuration.

OXC is based on industry proven, long-life, reliable MEMS 1xN optical switch components. MxN OXC is built by cascading M 1xN switches and N 1xM switches. Every input has a 1xN switch, while every output has a Mx1 switch. The output fibers of each 1xN are spliced to the N side of each Mx1 to allow any input to connect to any output.

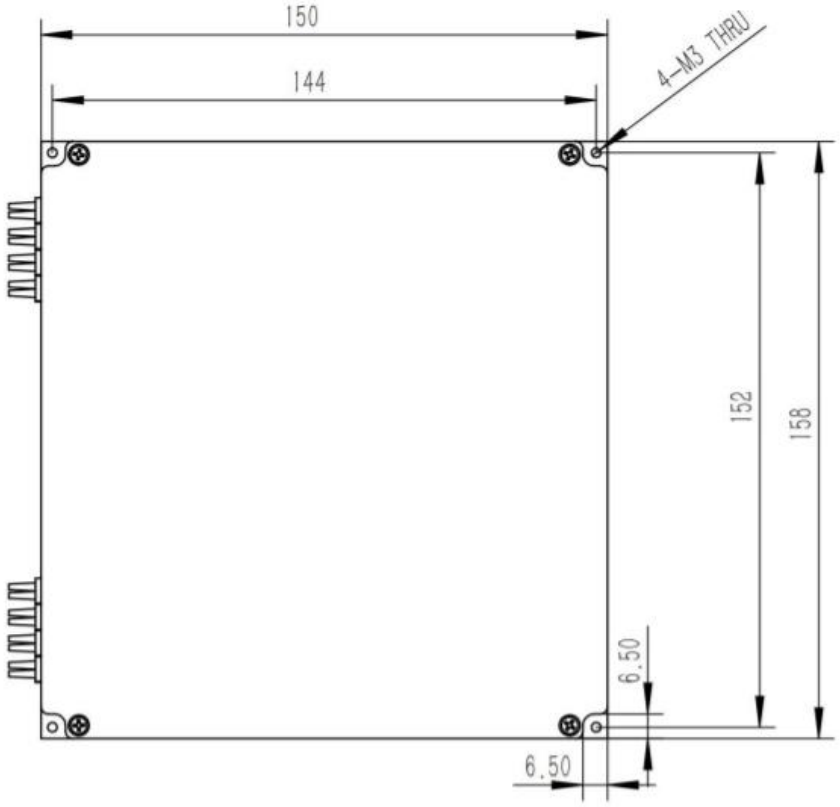
Specification

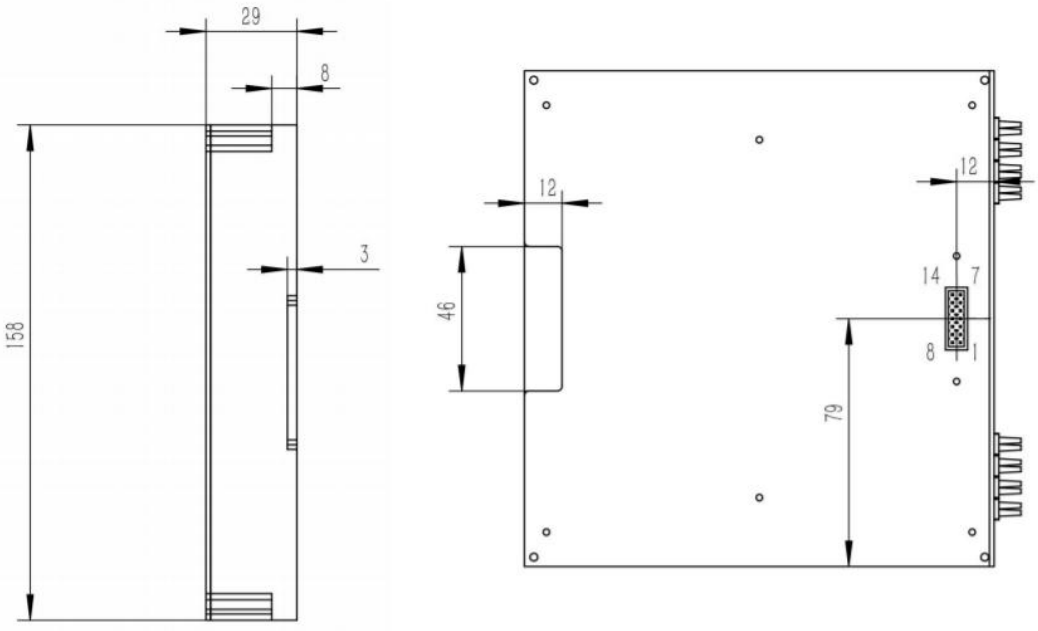
PARAMETER		VALUE
Wavelength (nm)		1290~1330/ 1525~1568/1600-1650
MxN		4×4/8×8/16×16/32×32
Insertion Loss （dB)	4×4	≤1.6, typical 1.4
	8×8	≤1.8, typical 1.6
	16×16	≤2.2, typical 2.0
	24×24	≤2.6, typical 2.4
	32×32	≤2.8, typical 2.6
Return Loss (dB)		≥45
Repeatability(dB)		≤0.1
Crosstalk(dB)		≥60
PDL (dB)		≤0.3
WDL(dB)		≤0.3
TDL (dB)		≤0.4
Switch Time (ms)		≤10 @16×16
		≤20 @24×24
Durability (cycle)		≥1×10^9
Maximum Optical Power(mW)		≤500
Package (mm)		150 x 150 x 20
Supply Voltage (V)		5~12

Optical Path



Dimension





OPTOSUN

ELECTRIONIC PIN DEFINITION

PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	No Connect	8	Reserved
2	5V(VCC)	9	Reserved
3	Reserved	10	Reserved
4	Ground(GND)	11	Ground(GND)
5	Reserved	12	Reserved
6	UART RX Data	13	Reserved
7	UART TX Data	14	Hardware Reset(/RESET)