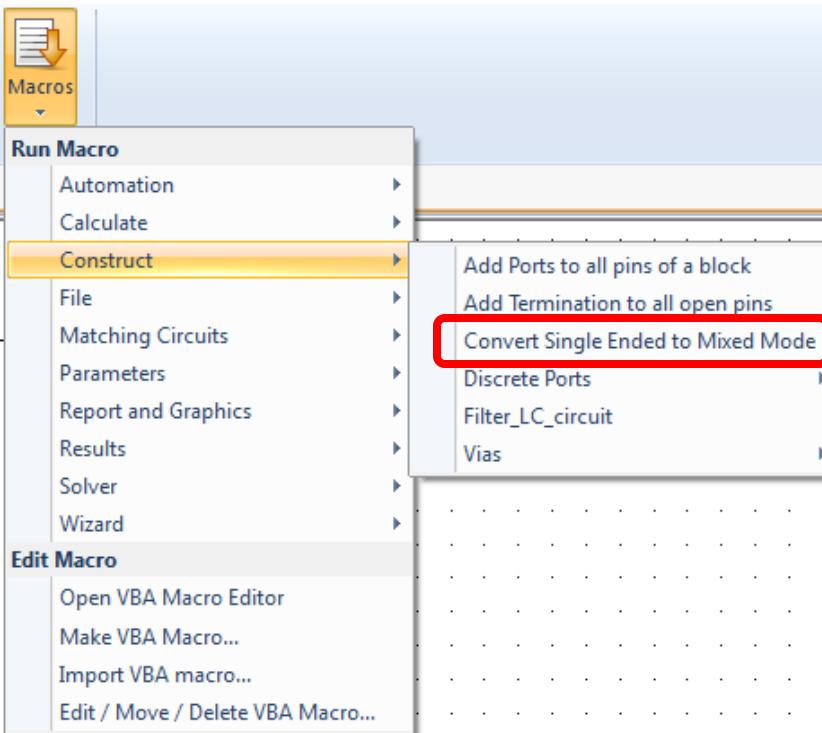
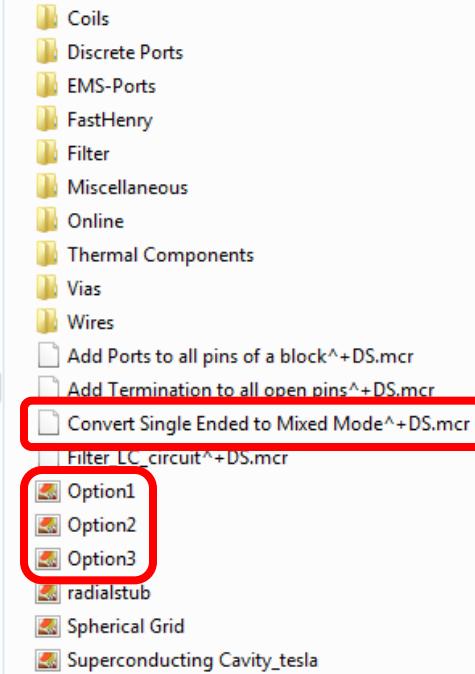


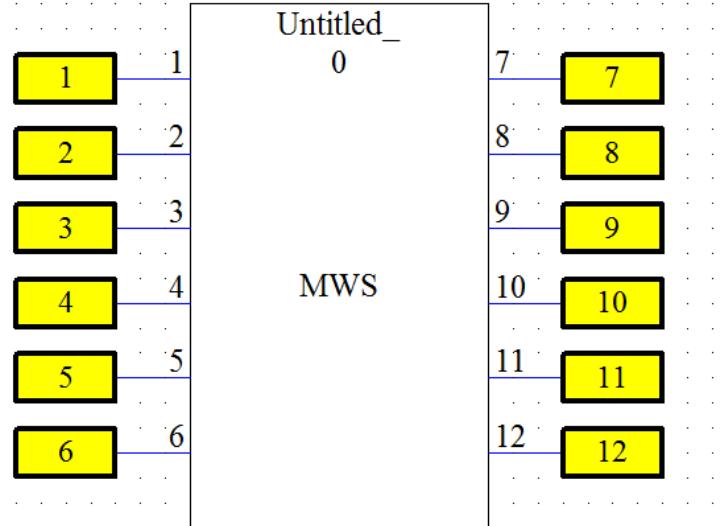
# Macro



Installation path + \CST STUDIO SUITE  
\Library\Macros\Construct



# Single Ended Option



Single Ended

Mixed Mode Configuration

Port 1 → 3, Port 2 → 4, Port 5 → 7, Port 6 → 8, ...  
(Single Ended Port Configuration)

\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion

Port 1 → 2, Port 3 → 4, Port 5 → 6, Port 7 → 8, ...  
(Single Ended Port Configuration)

\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion

Port 1 → 7, Port 2 → 8, Port 3 → 9, Port 4 → 10,  
(Single Ended Port Configuration)

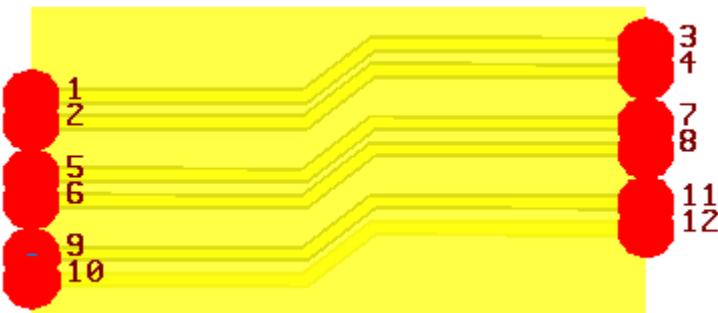
\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion

Differential Port  
100 Ohm (Port or Load Impedance)

Common Mode Port  
25 Ohm (Port or Load Impedance)

1. External Port will be created if the options are checked. Otherwise, termination load will be created
2. Common Mode Port will be numbered after Differential Port
3. Impedance will be defined on either external port or termination load (depends on choices)
4. S2,1 will be insertion loss (differential or common mode if differential port is not defined)

# Option 1



Port 1 → Port 3

Port 2 → Port 4

.

.

.

Port 10 → Port 12

Single Ended  
Mixed Mode Configuration

Port 1 → 3, Port 2 → 4, Port 5 → 7, Port 6 → 8, ...  
(Single Ended Port Configuration)

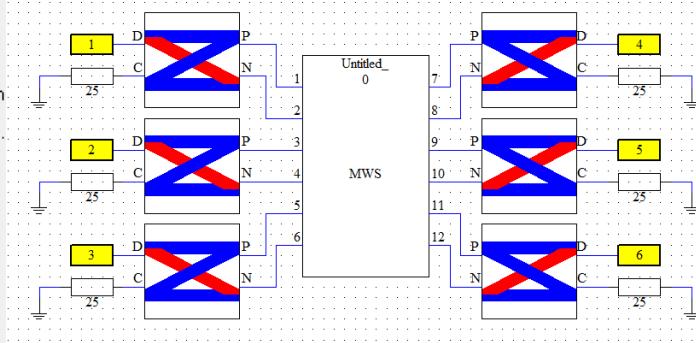
\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion

Port 1 → 2, Port 3 → 4, Port 5 → 6, Port 7 → 8, ...  
(Single Ended Port Configuration)

\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion

Port 1 → 7, Port 2 → 8, Port 3 → 9, Port 4 → 10, ...  
(Single Ended Port Configuration)

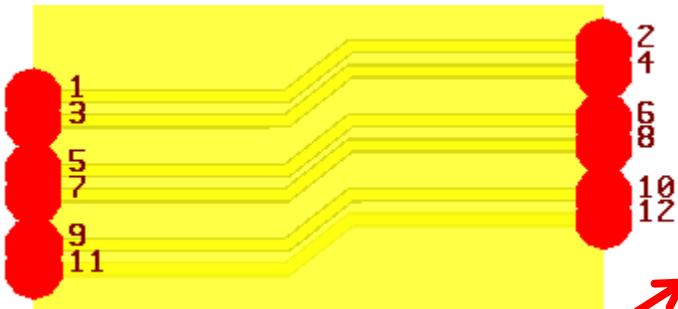
\*p/s: Insertion Loss == S2,1 after Mixed Mode Conversion



P → Port 1 ... P → Port 3  
N → Port 2 ... N → Port 4

S2,1 → Differential  
Insertion Loss

# Option 2



Single Ended Configuration

Port 1 → Port 2

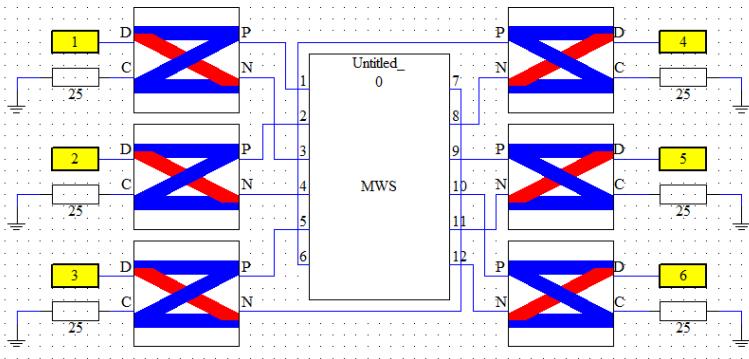
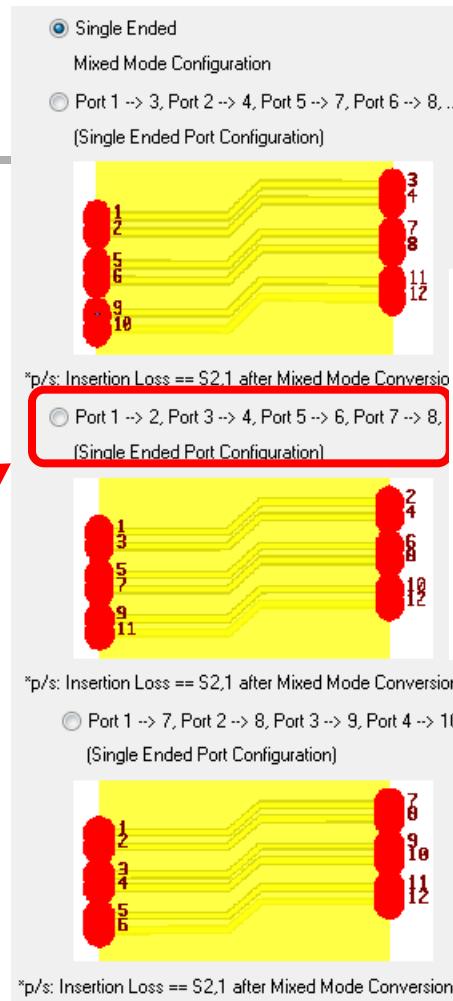
Port 3 → Port 4

.

.

.

Port 10 → Port 12

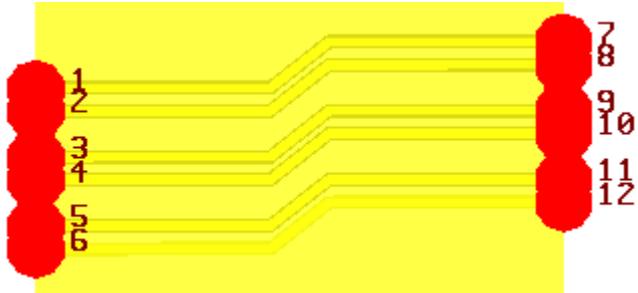


P → Port 1 ... P → Port 2

N → Port 3 ... N → Port 4

S2,1 → Differential  
Insertion Loss

# Option 3



Single Ended Configuration

Port 1 → Port 7

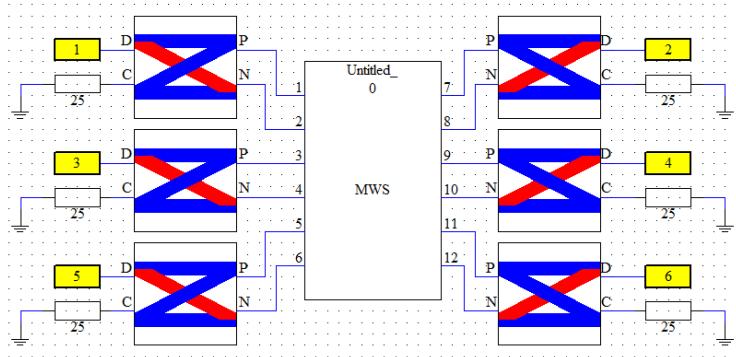
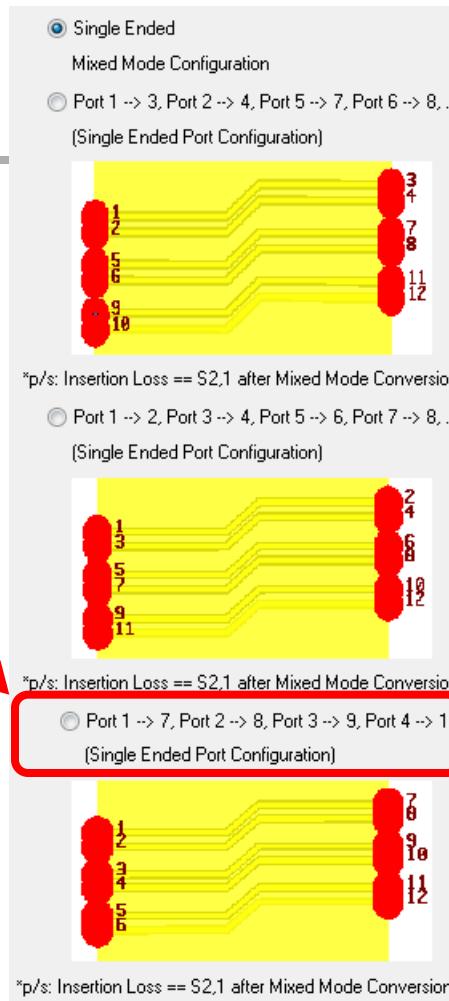
Port 2 → Port 8

.

.

.

Port 6 → Port 12



P → Port 1 ... P → Port 7  
N → Port 2 ... N → Port 8

S2,1 → Differential  
Insertion Loss