

# LMR 100A Cables for the MCEN Boards

Rev. D

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## 1 Cable Runs and Lengths

There are 16 Times Microwave LMR 100A coaxial cables on the MCEN board. They run from the 16 serial link daughter boards (SLDBs) to the two CONEC connector shells (P/N CFM8W8S-K100) on the tail, see Figure 1. A detailed view of the connections on the tail is shown in Figure 2. The lengths of the cables are given in Table 1.

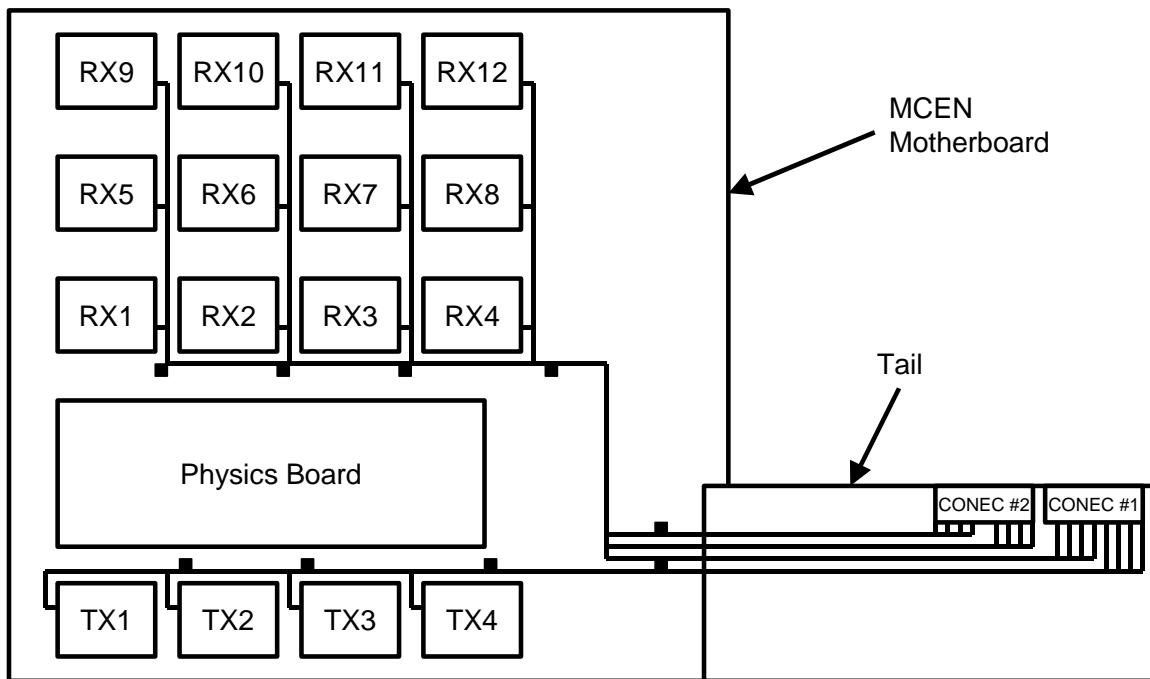


Figure 1. The MCEN layout showing the SLDB transmitters (TX1-4) and receivers (RX1-12), the tail, and the CONEC connector shells. Also shown are the approximate cable runs from the SLDBs to the CONEC shells.

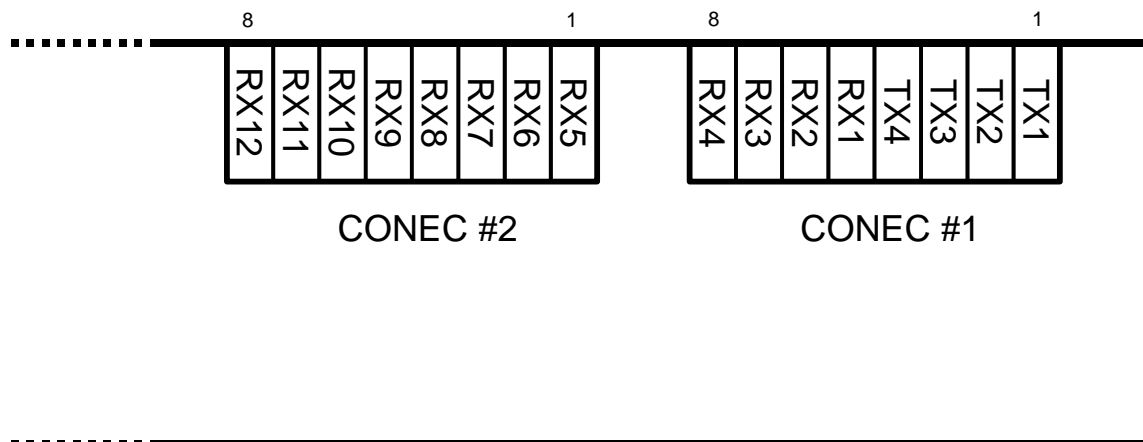


Figure 2. Close-up view of the MCEN tail and the CONEC connector shells. Each CONEC shell holds eight LMR 100A cables connected at the other end to the SLDBs indicated.

From	To	Length (inches)
TX1	CONEC #1-1	26 1/2
TX2	CONEC #1-2	23 1/2
TX3	CONEC #1-3	20 3/4
TX4	CONEC #1-4	17 5/8
RX1	CONEC #1-5	25 1/2
RX2	CONEC #1-6	22 1/4
RX3	CONEC #1-7	19 1/2
RX4	CONEC #1-8	17
RX5	CONEC #2-1	26
RX6	CONEC #2-2	22 1/2
RX7	CONEC #2-3	19 1/2
RX8	CONEC #2-4	17 1/8
RX9	CONEC #2-5	26 3/8
RX10	CONEC #2-6	23 1/4
RX11	CONEC #2-7	20 1/8
RX12	CONEC #2-8	17 1/4

Table 1. Cable lengths in inches.

## 2 Connectors

Each LMR 100A cable is terminated on one end by a Johnson Components MCX right angle connector, see Figure 3, and on the other end by a CONEC connector (P/N CFMX006S102), see Figure 4.

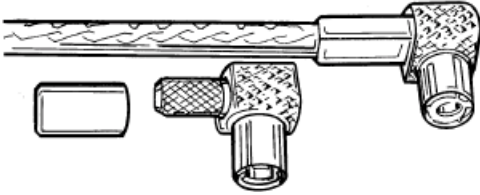


Figure 3. Johnson Components MCX right angle connector.

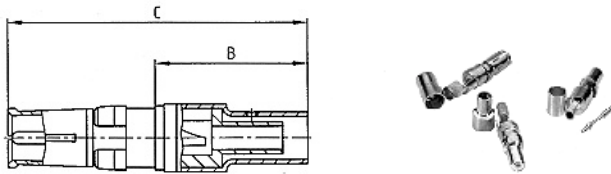


Figure 4. CONEC socket connector.

## 3 Revision History

### Rev. B

- Swapped numbering of RX1-4 and RX9-12 SLDBs.
- Moved CONEC connectors from bottom of tail to top.

### Rev. C

- Changed order of connections to CONEC connectors.

### Rev. D

- Revised lengths based on first prototype set.