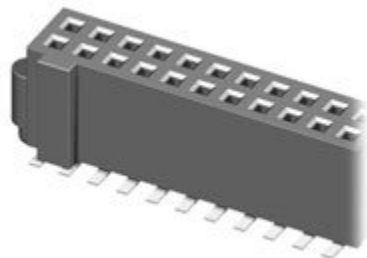# TE0320 Board-to-Board Connectors

The module has two B2B (board-to-board) connectors (JM4 and JM5) with the following features:

- gender: female
- overall number of contacts: 160
- contacts per connector: 80
- rows per connector: 2
- pitch: 1.27 mm = 50 mil = .050"

Board to board connector assembled on the TE0320.

Trenz Electronic recommends to mate the standard B2B connectors with the following ones:

- 2 x W+P 6110-080-00-10-PPTR 1.27 mm (50 mil = .050") pitch 80-pin double row boxed plug (male) header board-to-board (B2B) connectors.
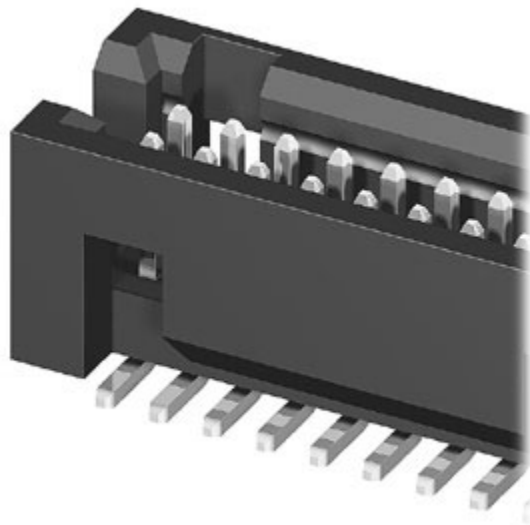
Close-up of the recommended mating B2B connector.

This connector couple offers the following two advantages:

- the module is protected against polarity inversion;
- the connection presents a mechanical resistance sufficient for most applications.

Ordering codes for connectors JM4 / JM5 and their mating connectors are given in the table below.

connector	gender	W+P PRODUCTS part number	Trenz Electronic part number
B2B connector JM4 + JM5	female	6060-080-46-00-10-10-PPTR	23758
B2B mating connector	male	6110-080-00-10-PPTR	23749

**Ordering codes of recommended B2B connectors.**

The mating height of connectors 6060-080-46-00-10-10-PPTR and 6110-080-00-10-PPTR is 6mm.
Connectors JM4 and JM5 can mate also with any 1.27 mm (50 mil = .050") pitch male header connectors with up to 2 × 40 pins.

Sample matching header connector.

Connectors JM4 and JM5 and are placed on the bottom side of the module as shown in the figure below.
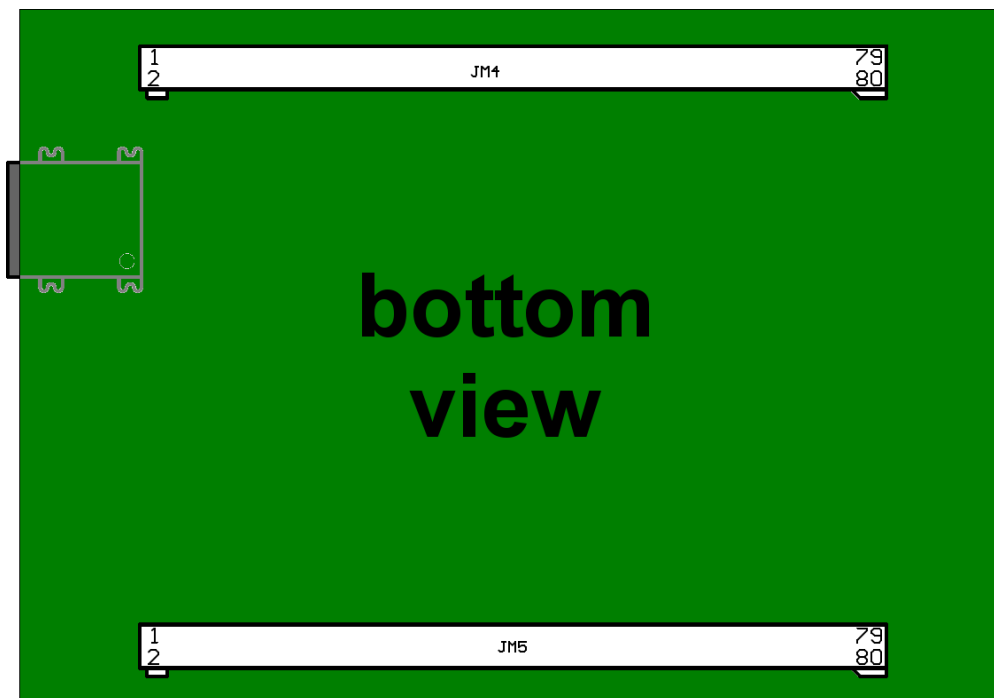
Female header connectors JM4 and JM5 (bottom view).

Hardware Design Requirement

PUDC_B (pull-up during configuration, active Low) pin in TE0320 modules is hard-wired high, determining user-I/O pins to float before and during configuration. Turning off pull-up resistors in hot-swap or hot-insertion applications, disables potential current paths to the I/O power rail. However, external pull-up or pull-down resistors may be required on each individual I/O pin depending on the specific application.