

Module Connection Guide (Mercedes EQS)

These battery modules are provided with a short isoSPI network pigtail from the original manufacturer. Use the pigtail to splice into the Dilithium MCU isoSPI network, and to connect between multiple modules in a pack.

Strings of up to 8 modules in each MCU isoSPI network (A and B) are permitted. Packs using series or parallel module arrangements may be designed to reach system voltage and capacity targets.

Use the following table to connect a module to the MCU. Wire colors refer to the original manufacturer pigtails.

Module isoSPI Wire Color	Connect to MCU isoSPI
Orange	MCU IPO (A or B)
Orange /Black	MCU IMO (A or B)

Use the following table to make connections between battery modules. When wiring, “Upstream” is an isoSPI network position closer to the MCU.

Upstream Module isoSPI	Downstream Module isoSPI
Orange /Blue	Orange
Orange /Green	Orange /Black

Connection and configuration notes:

- Module cases must be electrically connected to vehicle negative 12v (chassis ground) for reliable isoSPI communication.
- The MCU must be configured for 18 cell LTCs. Use the MCU command “**set arch ltc18**”
- If the MCU does not read any or all cells correctly, then verify the isoSPI connections.
- isoSPI wire pairs should be twisted (1 full twist/inch) from the MCU and between modules.
- It is possible to connect directly to the module isoSPI plug using connector #2177587-1 (and applicable terminals) from TE/Amphenol.

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