

Power Distribution Box (PDB)

Higher integration of power distribution functions and added-value features using semiconductor relays, compared to conventional junction blocks (J/B)

Background or Challenges

As the space for mounting PDBs decreases, downsizing and higher integration are required

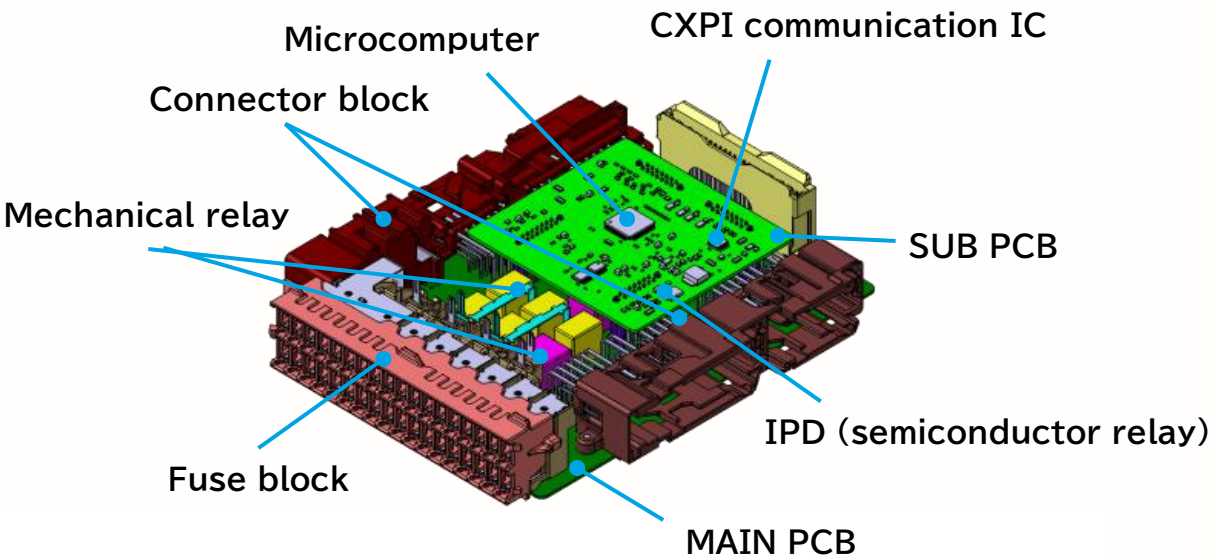
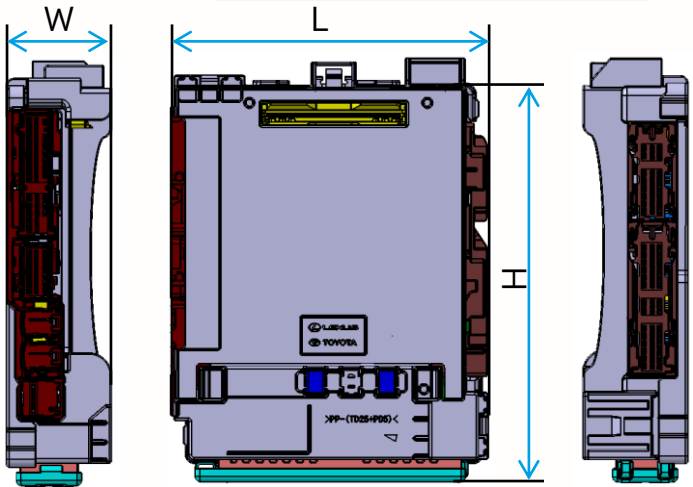
Solutions to Challenges or Features

- 1 Downsizing and higher integration by using semiconductor relays
- 2 Enables maintenance-free design by using semiconductor fuses
- 3 Achieves self-diagnosis and failure detection by utilizing microcomputers

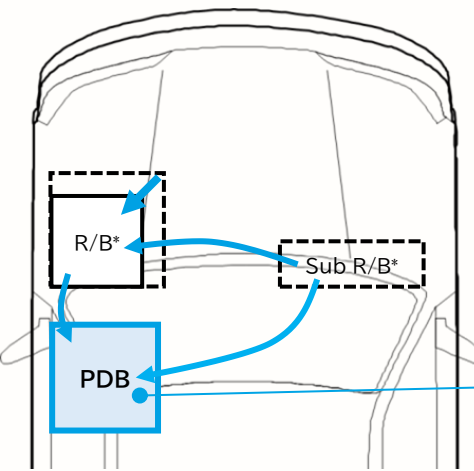
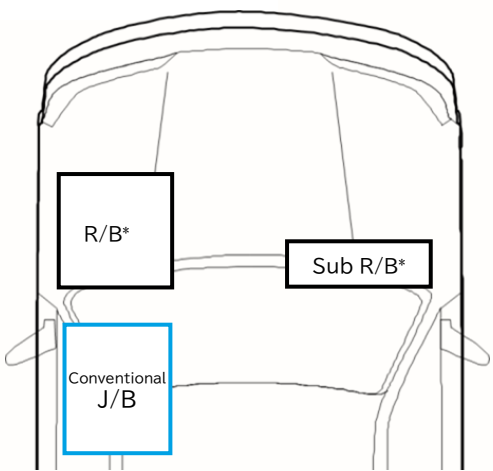
Main performance, specifications/structure

Fuse	46 pcs
Mechanical relay	11 pcs
Semiconductor relay	7 pcs
Number of connector terminals	157 pcs

Total energized current value	Approx. 120A
Body size (L×W×H)	142 × 47 × 18 [mm]
Communication protocol	CXPI



Effects when using PDB



- Sub-R/B* eliminated
- R/B* size reduced
- Relay/fuse can be added



*R/B: Relay box