

Multi-Board Manager

3 board(s)

Project: SWIFT_deployment_board

ⓘ All boards share the same schematic. Edits made anywhere are instantly reflected everywhere.

Filter boards...

2 board(s) open in KiCad

Status	Board	Components	Ports	Description	Path
✖ Open	Board1	93	2	Bottom of stack, contains MCU stage and logic arbitration (MUX) with local 3v3 power gen. Contains safety FSM with 24v auto-detection and latching mechanism for battery. 3 additional connectors to flash MCUs.	boards/Board1/Board1.kicad_pcb
✖ Open	Board2	56	4	Middle board, contains deploy stage with buck, boost and channel arbitration (MOSFETS). No additional connectors.	boards/Board2/Board2.kicad_pcb
✓	Board3	111	1	Top board, contains battery charger, passivation logic. Also has RBF to connect battery to system (remove to connect) and RBF to disable TRIGGER_IDD (RBF present = cannot trigger device). Has two ADM1270 for power protection of VBAT and 24V from SAT.	boards/Board3/Board3.kicad_pcb

+ New

✖ Remove

↗ Open

↻ Update

≡ Ports

🔍 Description

♥ Health

≡ Compare

✓ Check All

≡ Status

3 board(s), 260 component(s) placed

Close

Multi-Board Manager

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▷ Buck

🔍 2 board(s) open in KiCad

Status	Board	Components	Ports	Description	Path
🔴 Open	Board2	56	4	Middle board, contains deploy stage with buck, boost and channel arbitration (MOSFETS). No additional connectors.	boards/Board2/Board2.kicad_pcb

+ New

✕ Remove

↗ Open

↻ Update

≡ Ports

🔍 Description

♥ Health

= Compare

✓ Check All

≡ Status

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2 board(s)

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⌘ Open	Board1	93
⌘ Open	Board2	56
✓	Board3	111

Create New Board



New Sub-Board

Create a PCB that shares this project's schematic

Board Name

Description



The new board will share the project schematic.
Use Update to assign components.

Cancel

Create Board

Path

boards/Board1/Board1.kicad_pcb

boards/Board2/Board2.kicad_pcb

boards/Board3/Board3.kicad_pcb

+ New

× Remove

↗ Open

↻ Update

≡ Ports

🔍 Description

♥ Health

⚖ Compare

✓ Check All

☰ Status

● Opened 'Board1'

Close

Multi-Board Manager

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2 boards

Status	Board	Components
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⊗ Open	Board2	56
✓	Board3	111

Manage Ports — Board2



Inter-Board Ports

Define electrical connection points between boards

Port Name	Connected Net	Edge	Position
CAN+	/Project Architecture/C...	Left	20%
CAN-	/Project Architecture/C...	Left	10%
GND	GND	Right	50%
TRIGGER_PRE_RBF	TRIGGER_PRE_RBF	Left	0%

+ Add Port

✎ Edit

✕ Remove

Cancel

Apply Changes

Path

ds/Board1/Board1.kicad_pcb

ds/Board2/Board2.kicad_pcb

ds/Board3/Board3.kicad_pcb

+ New

✕ Remove

↗ Open

↻ Update

≡ Ports

📄 Description

♥ Health

= Compare

✓ Check All

☰ Status

● Opened 'Board1'

Close

Multi-Board Manager

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3 board(s)

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2 board(s)

Status	Board	Component(s)
Open	Board1	93
Open	Board2	56
✓	Board3	111

Manage Ports — Board2

Inter

Port Configuration

Port Settings

Define an inter-board connection point

Port Name CAN-

Net Name /Project Architecture/Control/MCU/CAN-

Board Edge Right

Position 50%

Cancel

Save

Cancel

Apply Changes

Path
ds/Board1/Board1.kicad_pcb
ds/Board2/Board2.kicad_pcb
ds/Board3/Board3.kicad_pcb

+ New

× Remove

^ Open

↺ Update

≡ Ports

🔍 Description

♥ Health

= Compare

✓ Check All

☰ Status

3 board(s), 260 component(s) placed

Close

Multi-Board Manager

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2 board(s) open in KiCad

Status	Board	Components
⌵ Open	Board1	93
⌵ Open	Board2	56
✓	Board3	111

Edit Board Description



Edit description for 'Board3':

[Top board, contains battery charger, passivation logic. Also has RBF to connect battery to system (remove to connect) and RBF to disable TRIGGER_IDD (RBF present = cannot trigger device). Has two ADM1270 for power protection of VBAT and 24V from SAT.

OK

Cancel

Path
boards/Board1/Board1.kicad_pcb
boards/Board2/Board2.kicad_pcb
boards/Board3/Board3.kicad_pcb

+ New

✕ Remove

➤ Open

↻ Update

≡ Ports

🔍 Description

♥ Health

⚖ Compare

✓ Check All

☰ Status

3 board(s), 260 component(s) placed

Close

Multi-Board Manager

Project: SWIFT_deployment_board

3 board(s)

All boards share the same sche

Filter boards...

Status	Board	
Open	Board1	93
Open	Board2	56
✓	Board3	111

Board Health Report



✓ All Boards Healthy

Project: SWIFT_deployment_board • Boards: 3 • ✓ 3 △ 0 × 0

- ✓ Board1
 - Components: 151
 - Ports: 2
 - Modified: 2026-01-07 16:40
 - ☐ Currently open in KiCad
- ✓ Board2
 - Components: 63
 - Ports: 4
 - Modified: 2026-01-07 16:46
 - ☐ Currently open in KiCad
- ✓ Board3
 - Components: 111
 - Ports: 1
 - Modified: 2026-01-07 01:06

Close

Path

/Board1.kicad_pcb

/Board2.kicad_pcb

/Board3.kicad_pcb

+ New

× Remove

Open

Update

Ports

Description

♥ Health

Compare

✓ Check All

Status

• Checking health...

Close

Multi-Board Manager

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3 board(s)

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Filter boards...

Status	Board	Com
⚙ Open	Board1	93
⚙ Open	Board2	56
✓	Board3	111

Compare Boards



Board Comparison

Compare component placement between two boards

Board 1: Board1

vs

Board 2: Board2

= Compare

== Comparison: Board1 vs Board2 ==

Components in Board1: 93

Components in Board2: 56

Common components: 0

— Only in Board1 (93) —

C1
C10
C11
C12
C13
C14
C15
C16
C17
C18
C19
C2

Close

+ New

✕ Remove

➤ Open

↺ Update

≡ Ports

🔍 Description

♥ Health

= Compare

✓ Check All

≡ Status

● Ready

Close

Multi-Board Manager

Project: SWIFT_deployment_board

All boards share the same sche

Filter boards...

Status	Board	
⚠ Open	Board1	93
⚠ Open	Board2	56
✓	Board3	111

Connectivity Report



638 Violation(s)

Boards checked: 3 • DRC violations: 638 • Errors: 0

⚠ Board1: 234 violation(s)

- isolated_copper: Isolated copper fill
- isolated_copper: Isolated copper fill
- isolated_copper: Isolated copper fill
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- clearance: Clearance violation (board minimum clearance 0.2000 mm; actual 0.1826
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⚠ Board2: 227 violation(s)

Close

+ New

× Remove

↗ Open

↻ Update

≡ Ports

🔍 Description

♥ Health

= Compare

✓ Check All

≡ Status

● 638 violation(s)

Close

Multi-Board Manager

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3 board(s)

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2

Status	Board	Comp
⚙ Open	Board1	93
⚙ Open	Board2	56
✓	Board3	111

Component Status

Component Placement

Total: 331 • Placed: 260 • Unplaced: 101

- ✓ Board1 (93 components)
- ✓ Board2 (56 components)
- ✓ Board3 (111 components)
- C38
- C39
- C40
- C41
- C42
- C43
- C44
- C45
- C46
- C47
- C48
- C50
- C52
- C56
- C57
- C58

Close

Path

board1/Board1.kicad_pcb

board2/Board2.kicad_pcb

board3/Board3.kicad_pcb

+ New

✕ Remove

➤ Open

↺ Update

≡ Ports

🔍 Description

♥ Health

= Compare

✓ Check All

≡ Status

● 638 violation(s)

Close