Designed for: Public Release

Assembly Variant: [No Variations]

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Revision History

<table>
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Designator
BQ24745_24VtoBatt10A_sch.SchDoc

Designator
5V&12V_sch.SchDoc

Designator
MSP430&USB_sch.SchDoc

Designator
Hardware_PMP15025_sch.SchDoc
With present values ACIN reaches 2.4V with Vin above 21V, and allows ACOK to go "high" and goes high when input current drops below 7.2A.

Battery discharge circuit:

300kHz, PWM gain is 15V/V

signal GND to main Power Ground Net-Ties under BQ24745 Power Pad

Battery Power & Signal Connections

BQ24745 battery current sense allows 15A of charging vs. 8 A allowed normally.
EN rising at 1.21V falling at 1.17V
EN source current: 1.15µA below threshold; 4.45µA above threshold

Target 34kHz loop crossover for 5Vout and 44µF effective cap
If effective cap at 12Vout is 18µF; loop crossover will be same 34kHz

typical rising at 20.5Vin and falling at 16.5Vin
You should delete the nylon screws/standoffs and/or the bumpers as needed for your design (or substitute other parts from Hardware.IntLib). Bumpers are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You can delete this note too.

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**Label Table**

<table>
<thead>
<tr>
<th>Variant</th>
<th>Label Text</th>
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<tbody>
<tr>
<td>001</td>
<td>ChangeMe!</td>
</tr>
<tr>
<td>002</td>
<td>ChangeMe!</td>
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</tbody>
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**Assembly Notes**

- ZZ1: This Assembly Note is for PCB-laser only

- ZZ2: These assemblies are ESD-sensitive, ESD precautions shall be observed.

- ZZ3: These assemblies must be clean and free from flux and all contaminants. Use of no-clean flux is not acceptable.

- ZZ4: These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.
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