Capacitor against voltage transients on the encoder supply line

- VIN
- EN/UVLO
- CT
- QOD
- VOUT

CT=470pF sets the Vout rise time to 94us at 12V input

- VIN
- 1µF 25V
- C2

- U1
- TPS22810DBVR

- 3V3_ENC_PWR_EN
- Vsupply_Enc

- R14
- 1.0k

- GND

- VIN
- A1
- B1
- EN
- C1
- VOUT
- B2
- FB
- C2
- GND
- A2

- U2
- TPS61240YFFR

- 1µH

- L1

- VIN
- 4.7µF 10V
- C7

- 10µF 25V
- C5

- 22µF 10V
- C6

- GND

- 3V3

- 2.2µH
- L2

- VIN
- 2
- EN
- 3
- AGND
- 4
- VOS
- 5
- SW
- 6
- PG
- 8
- EP
- 9

- U3
- TPS62162DSGR

- 4.7k
- R20

- 2.2k
- R17

- 10k
- R19

- 10k
- R21

- 30k
- R15

- 0
- R13

- 0
- R16

- 22µF 10V
- C8

- 10V
- 2.2µF
- C8

- 3.6k
- R12

- 35V
- 2.2µF
- C3

- 470pF
- C4

- 10V
- 2.2µF
- C8

2.2µF capacitor against voltage transients on the encoder supply line

- 20 mV ripple is expected before filtering

- DNP U2 or R21

- 0-Ohm resistor to bypass 5V power supply when 3.3V transceivers are used.

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LaunchPad Connectors

Encoder / RS-485 Data Connector

Supply Voltage

Indicator LEDs

GND test points

TVS for unshielded cable test

Reverse polarity protection

Link Activity (LED)

Error
**Variant/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>
</tr>
</tbody>
</table>

**Assembly Notes**

- **ZZ1**: This Assembly Note is for PCB labels 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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