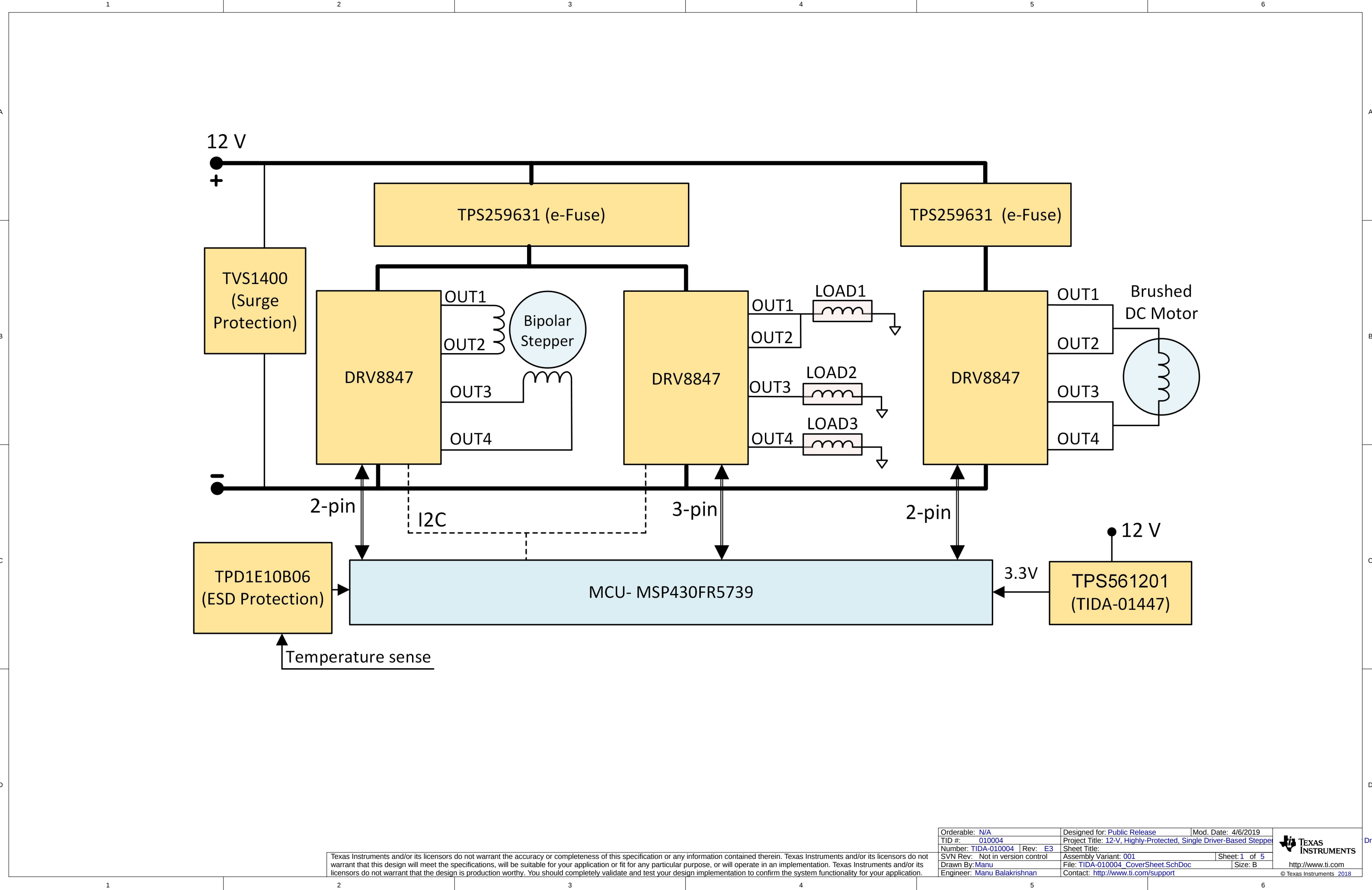
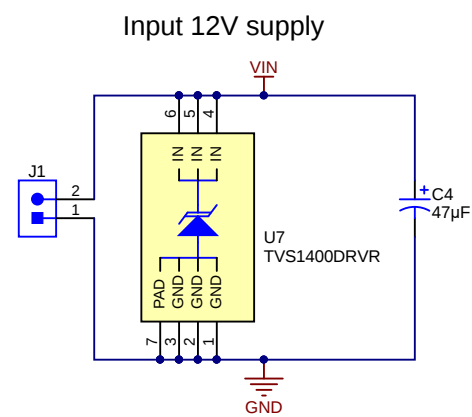




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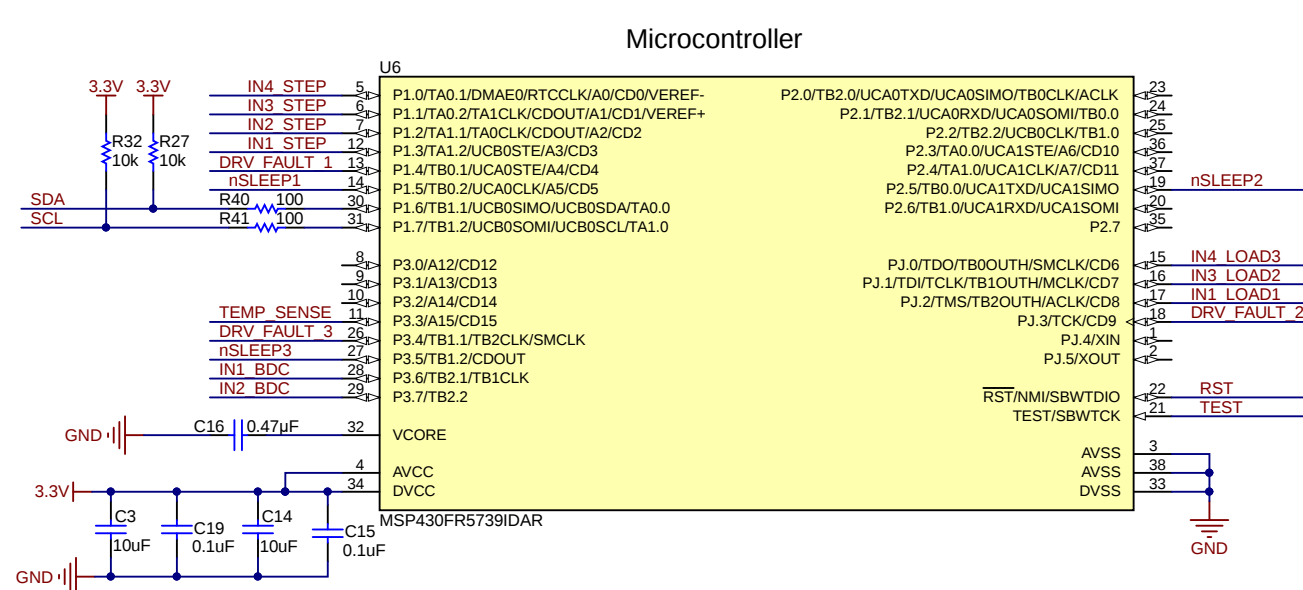
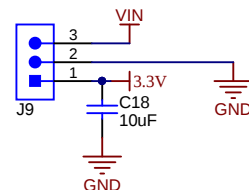
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|---------------------------------|----------------------------------------------------------------------------|---------------------|
| Orderable: N/A                  | Designed for: Public Release                                               | Mod. Date: 4/6/2019 |
| TID #: 010004                   | Project Title: 12-V, Highly-Protected, Single Driver-Based Stepper         |                     |
| Number: TIDA-010004             | Rev: E3                                                                    | Sheet Title:        |
| SVN Rev: Not in version control | Assembly Variant: 001                                                      | Sheet: 1 of 5       |
| Drawn By: Manu                  | File: TIDA-010004_CoverSheet.SchDoc                                        | Size: B             |
| Engineer: Manu Balakrishnan     | Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a> |                     |



Input 12V supply



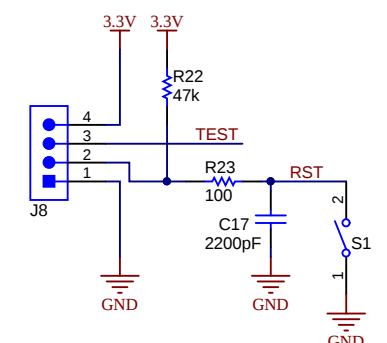
### 3.3V supply from TIDA-01447



## Microcontroller

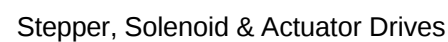
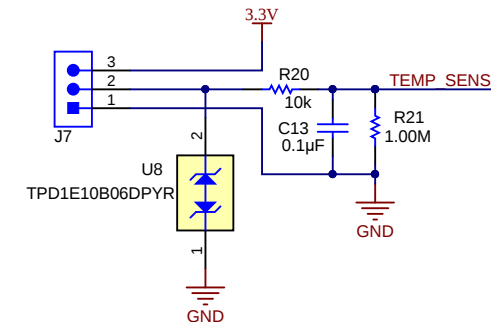


MCU Programming connector

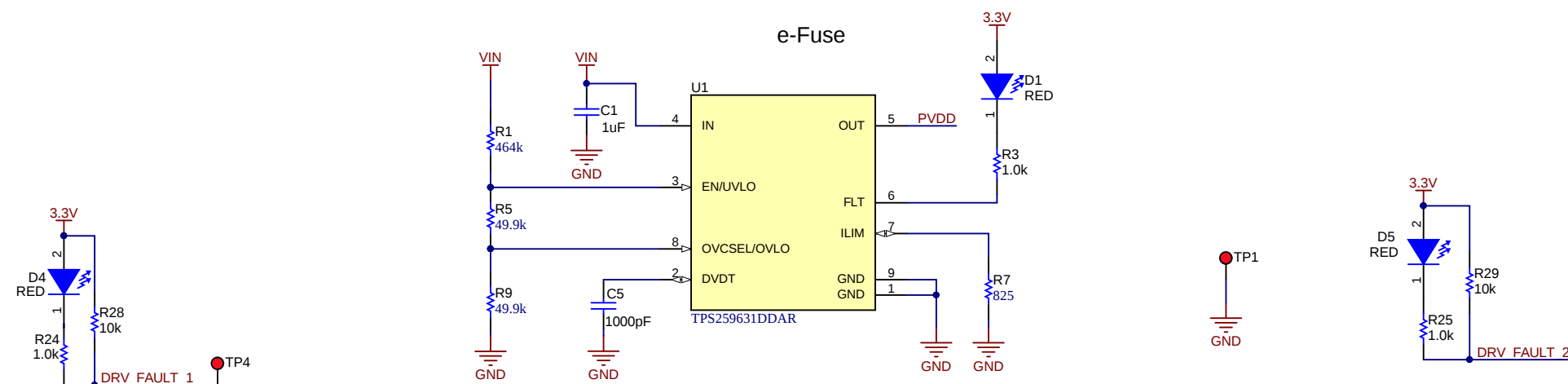


### Temperature sensor feedback

### Temperature sensor feedback

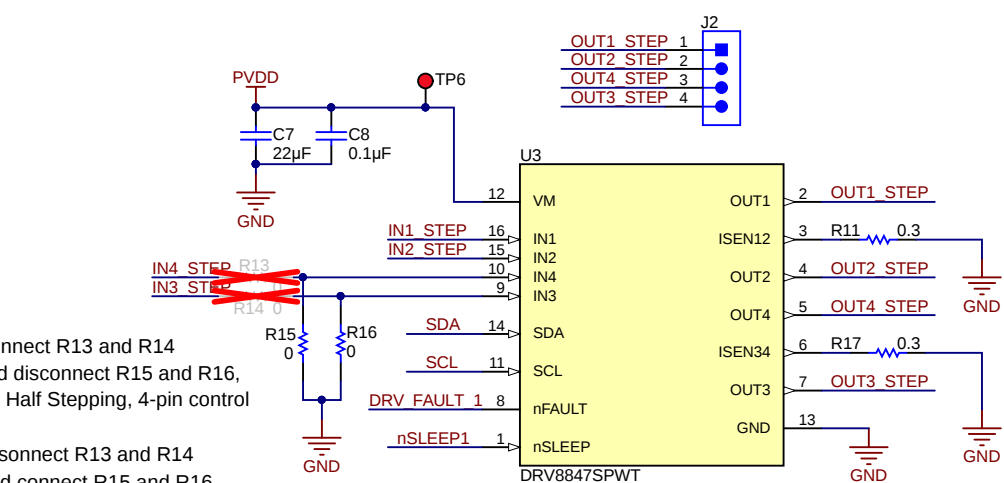


## Stepper, Solenoid & Actuator Drives



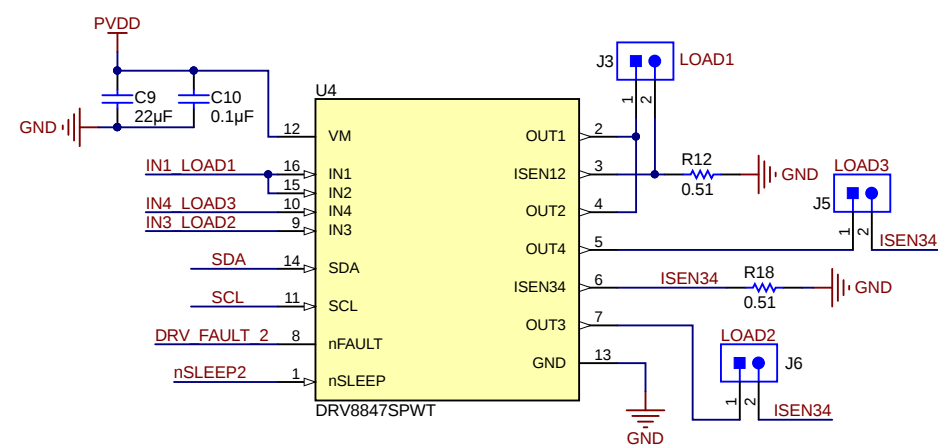
e-Fuse

e-Fuse



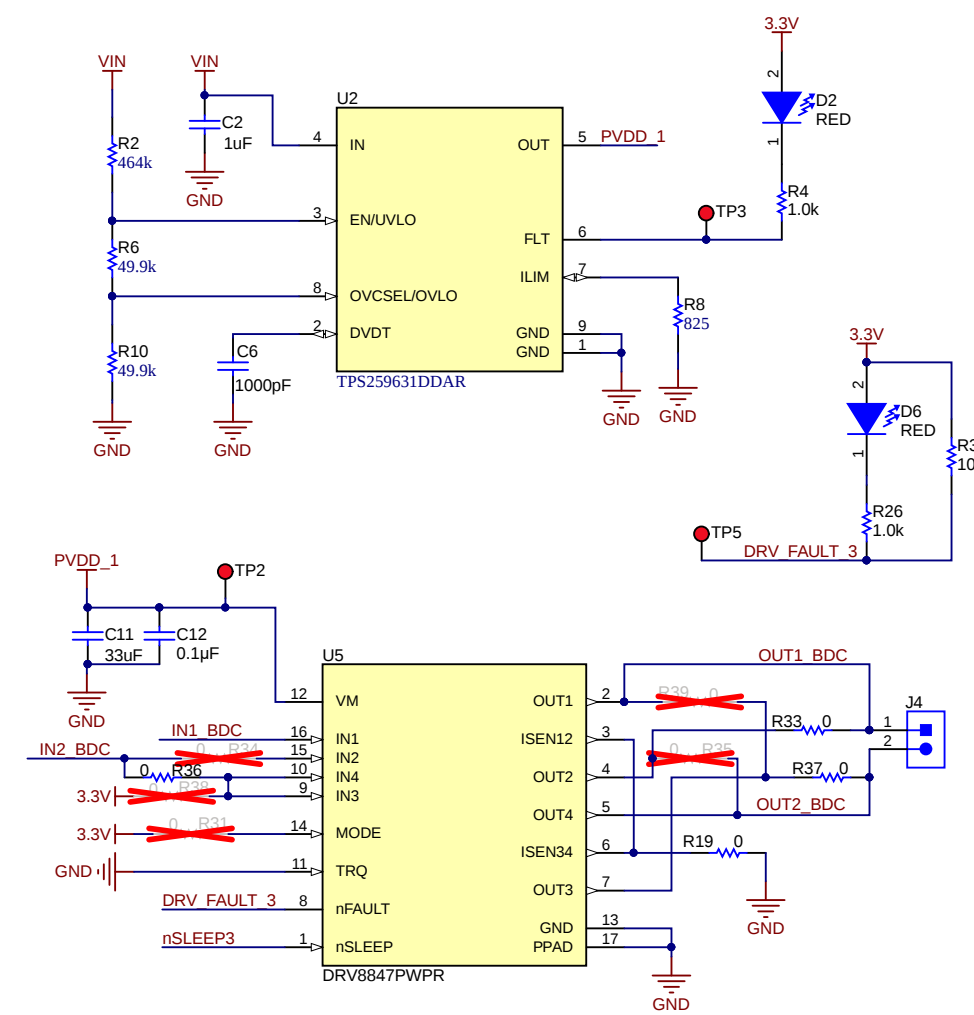
DRV8847 driving bi-polar stepper

DRV8847 driving bi-polar stepper



## DRV8847 driving independent loads

## DRV8847 driving independent loads



DRV8847 driving brushed DC motor

DRV8847 driving brushed DC motor

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|                                                 |                                                                                    |                                               |
|-------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------|
| Orderable: <a href="#">N/A</a>                  | Designed for: <a href="#">Public Release</a>                                       | Mod. Date: <a href="#">4/6/2019</a>           |
| TID #: <a href="#">010004</a>                   | Project Title: <a href="#">12-V, Highly-Protected, Single Driver-Based Stepper</a> |                                               |
| Number: <a href="#">TIDA-010004</a>             | Rev: <a href="#">E3</a>                                                            | Sheet Title:                                  |
| SVN Rev: <a href="#">Not in version control</a> | Assembly Variant: <a href="#">001</a>                                              | Sheet: <a href="#">4</a> of <a href="#">5</a> |
| Drawn By: <a href="#">Manu</a>                  | File: <a href="#">TIDA-010004_Page1.SchDoc</a>                                     | Size: <a href="#">B</a>                       |
| Engineer: <a href="#">Manu Balakrishnan</a>     | Contact: <a href="#">http://www.ti.com/support</a>                                 |                                               |

PCB Number: TIDA-010004  
PCB Rev: E3



PCB  
LOGO  
Logo2

PCB  
LOGO  
Logo3

| Label Table |            |
|-------------|------------|
| Variant     | Label Text |
| 001         | ChangeMe!  |
| 002         | ChangeMe!  |
|             |            |
|             |            |
|             |            |
|             |            |
|             |            |

ZZ1  
Label Assembly Note  
This Assembly Note is for PCB labels only

ZZ2  
Assembly Note  
These assemblies are ESD sensitive, ESD precautions shall be observed.

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

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

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|                                                 |                                                                                    |                                               |
|-------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------|
| Orderable: <a href="#">N/A</a>                  | Designed for: <a href="#">Public Release</a>                                       | Mod. Date: <a href="#">8/31/2018</a>          |
| TID #: <a href="#">010004</a>                   | Project Title: <a href="#">12-V, Highly-Protected, Single Driver-Based Stepper</a> |                                               |
| Number: <a href="#">TIDA-010004</a>             | Rev: <a href="#">E3</a>                                                            | Sheet Title:                                  |
| SVN Rev: <a href="#">Not in version control</a> | Assembly Variant: <a href="#">001</a>                                              | Sheet: <a href="#">5</a> of <a href="#">5</a> |
| Drawn By: <a href="#">Manu</a>                  | File: <a href="#">TIDA-010004_Hardware.SchDoc</a>                                  | Size: B                                       |
| Engineer: <a href="#">Manu Balakrishnan</a>     | Contact: <a href="#">http://www.ti.com/support</a>                                 |                                               |

1

2

3

4

5

6

A

B

C

D

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