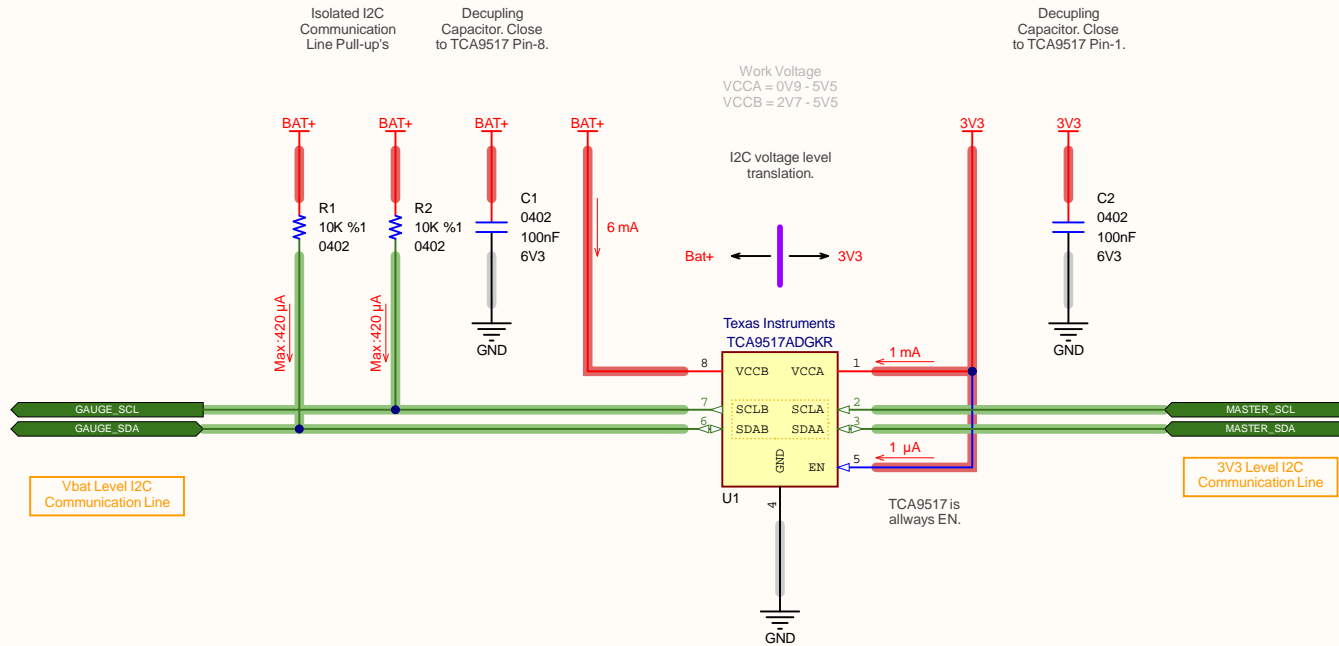


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 Engineer contact : akkoyun@me.com

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### I2C Buffer (Voltage Translator)



www.github.com/akkoyun/B100BA

|   |                        |                      |                                  |
|---|------------------------|----------------------|----------------------------------|
| <b>I2C Buffer (Battery Gauge)</b>             |                        |                      | Engineer : <b>Gunce Akkoyun</b>  |
| Size : <b>A4</b>                              |                        |                      | Customer : <b>STF Irrigation</b> |
| Project : <b>B100BA</b>                       |                        |                      | Product ID : <b>-</b>            |
| Date : <b>11.08.2021</b>                      | Time : <b>11:44:34</b> | Page : <b>2 / 10</b> | Module ID : <b>B100BA</b>        |
| File : <b>Battery Gauge I2C Buffer.SchDoc</b> |                        |                      | Version : <b>R1</b>              |
|   |                        |                      | Revision : <b>00.00.01</b>       |

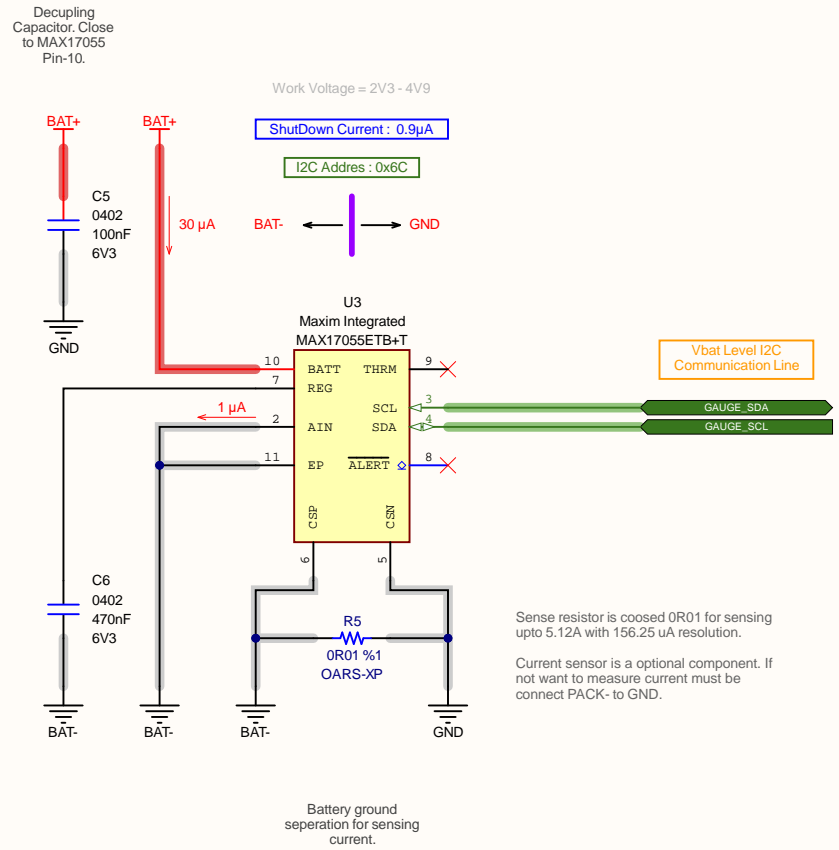
**Ovoo Electronics**  
 Askan Mah. Ortairmak Sok.  
 Birgul Apt. 19/6  
 Meram / Konya Türkiye



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### Battery Measurement



| Battery Measurement               |                 |               | Engineer :   | Güncé Akkoyun  |
|-----------------------------------|-----------------|---------------|--------------|----------------|
| Size : A4                         |                 |               | Customer :   | STF Irrigation |
| Project : B100BA                  |                 |               | Product ID : | -              |
| Date : 11.08.2021                 | Time : 11:44:35 | Page : 3 / 10 | Module ID :  | B100BA         |
| File : Battery Measurement.SchDoc |                 |               | Version :    | R1             |
|                                   |                 |               | Revision :   | 00.00.01       |

**Ovoo Electronics**

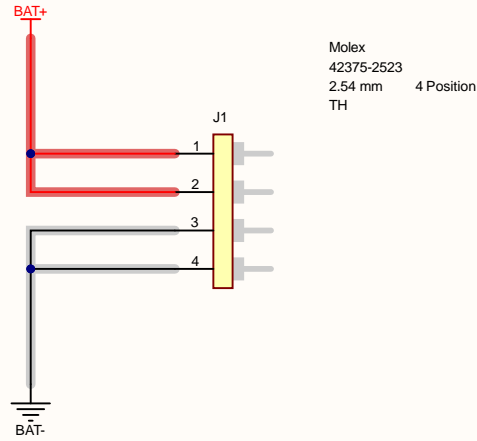
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### Battery Power Input Sockets



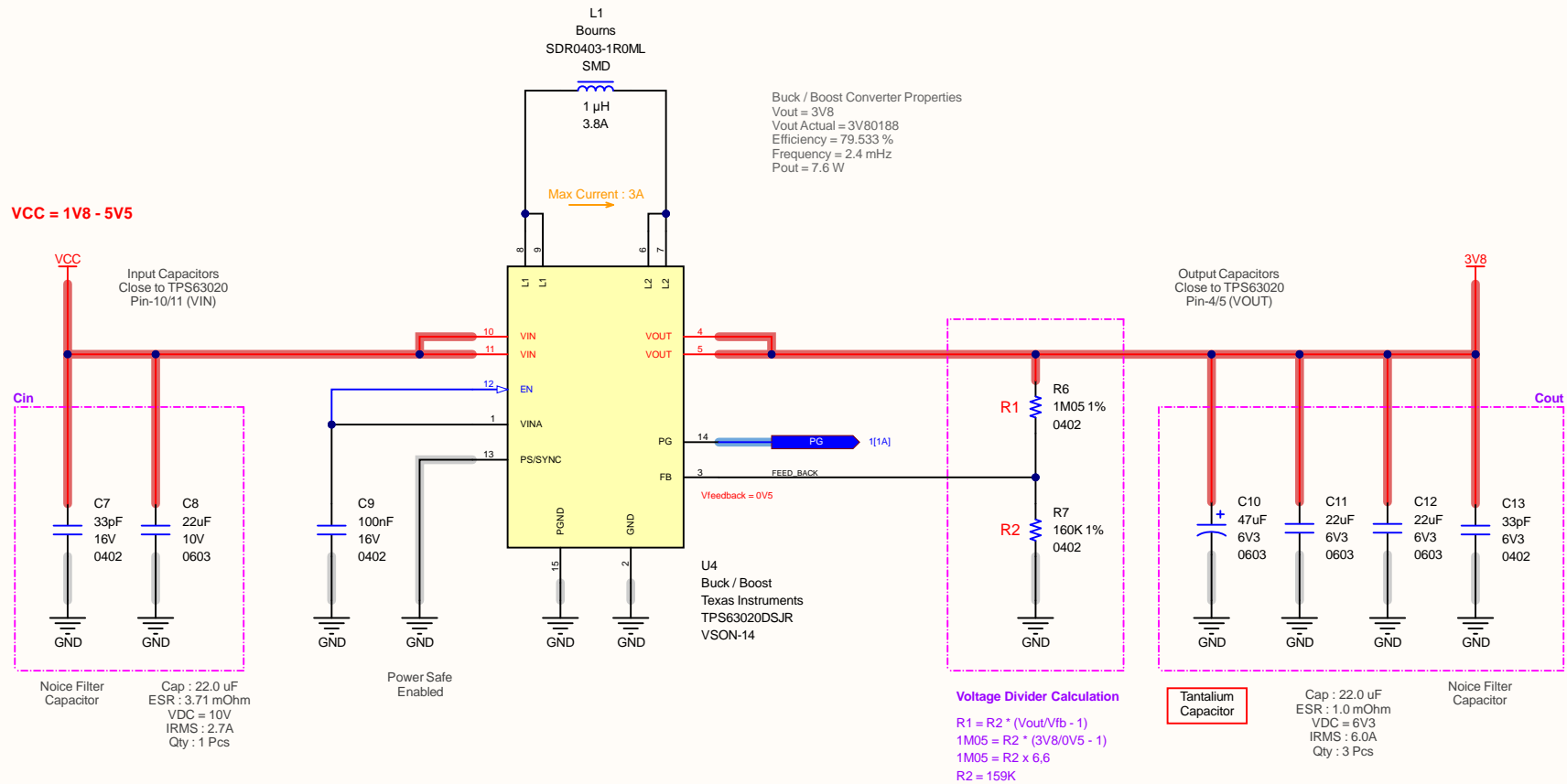
www.github.com/akkoyun/B100BA

| Battery Power Input Sockets |                                    |           | Engineer : | Güncé Akkoyun | Ovoo Electronics |  |                |
|-----------------------------|------------------------------------|-----------|------------|---------------|------------------|---|----------------|
| Size :                      | A4                                 | Project : | B100BA     | Customer :    |                  |   | STF Irrigation |
| Date :                      | 11.08.2021                         | Time :    | 11:44:35   | Module ID :   | B100BA           |   |                |
| Page :                      | 4 / 10                             | Version : | R1         | Revision :    | 00.00.01         |   |                |
| File :                      | Battery Power Input Sockets.SchDoc |           |            |               |                  |   |                |

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**3V8 2A Buck&Boost Converter**



C

D

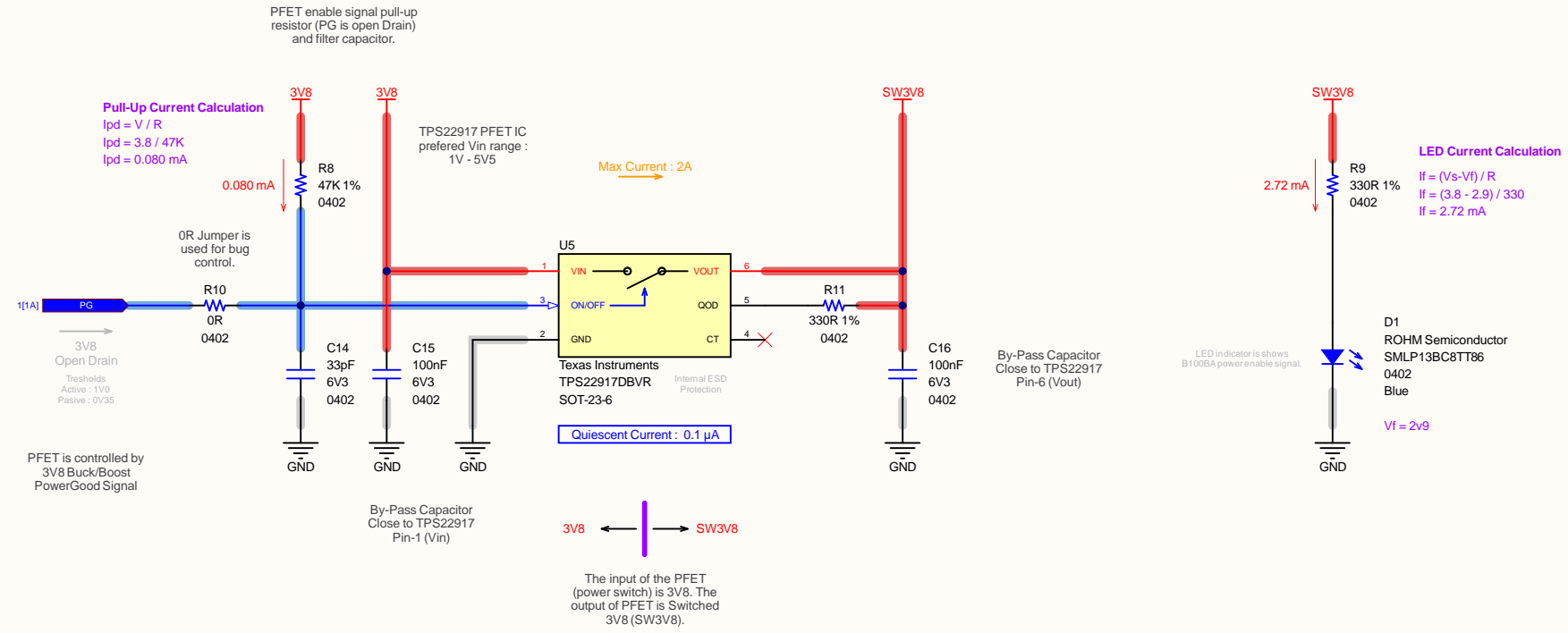
www.github.com/akkoyun/B100BA

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|                                     |                         |                      |                                 |                         |  |  |
|-------------------------------------|-------------------------|----------------------|---------------------------------|-------------------------|--|--|
| <b>3V8 Buck Boost</b>               |                         |                      | Engineer : <b>Gunce Akkoyun</b> | <b>Ovoo Electronics</b> | Askan Mah. Ortairmak Sok.<br>Birgül Apt. 19/6<br>Meram / Konya Türkiye |  |
| Customer : <b>STF Irrigation</b>    |                         |                      | Product ID : -                  |                         |  |  |
| Size : <b>A4</b>                    | Project : <b>B100BA</b> |                      | Module ID : <b>B100BA</b>       |                         |  |  |
| Date : <b>11.08.2021</b>            | Time : <b>11:44:35</b>  | Page : <b>5 / 10</b> | Version : <b>R1</b>             |                         |  |  |
| File : <b>3V8 Buck Boost.SchDoc</b> |                         |                      | Revision : <b>00.00.01</b>      |                         |  |  |

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Main Power Switch

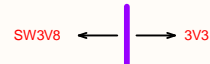
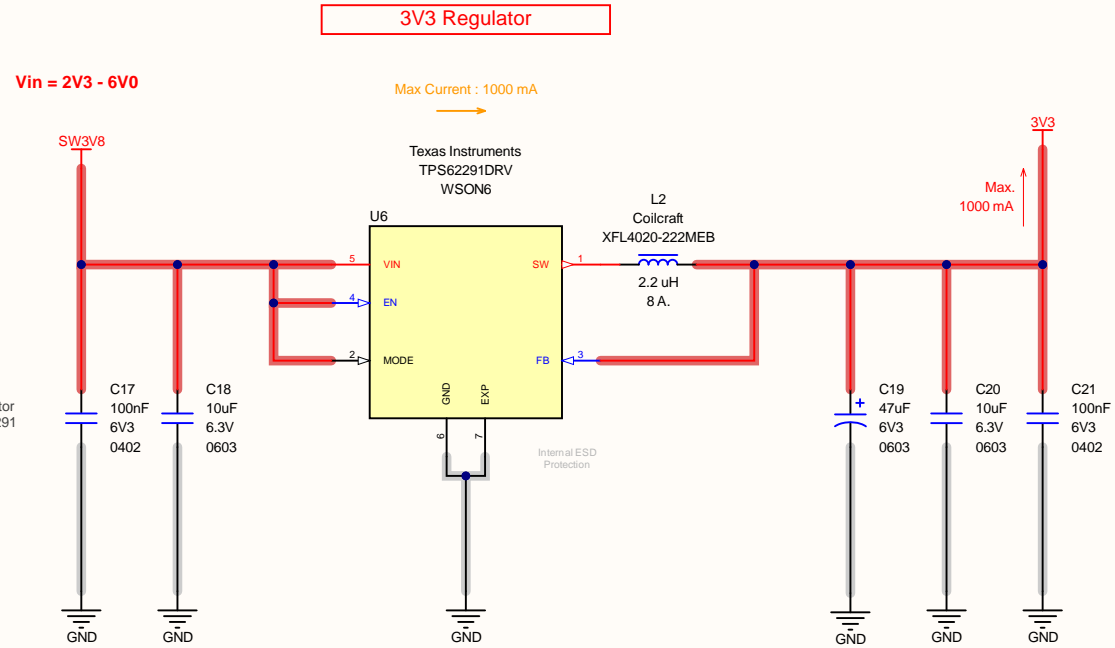


www.github.com/akkoyun/B100BA

|  |                         |                      |                                 |                           |  |
|--|-------------------------|----------------------|---------------------------------|---------------------------|--|
| <b>Main Power Switch</b>               |                         |                      | Engineer : <b>Gunce Akkoyun</b> | <b>Ovoo Electronics</b>   |  |
| Customer : <b>STF Irrigation</b>       |                         |                      | Product ID : -                  |                           |  |
| Size : <b>A4</b>                       | Project : <b>B100BA</b> |                      | Module ID : <b>B100BA</b>       | Askan Mah. Ortairmak Sok. |  |
| Date : <b>11.08.2021</b>               | Time : <b>11:44:35</b>  | Page : <b>6 / 10</b> | Version : <b>R1</b>             | Birgul Apt. 19/6          |  |
| File : <b>Main Power Switch.SchDoc</b> |                         |                      | Revision : <b>00.00.01</b>      | Meram / Konya Türkiye     |  |

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Tantalum Capacitor

TPS62291 Switching Regulator is a 3V3 regulator. Regulator is always enable.

Quiescent Current : 1.2  $\mu$ A

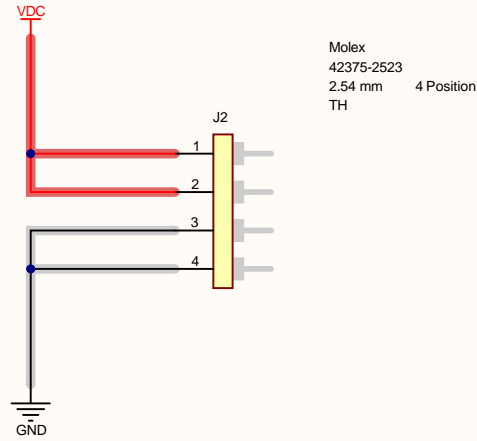
www.github.com/akkoyun/B100BA

|  |  |  |                                 |   |   |
|--|--|--|---------------------------------|---|---|
| <b>3V3 Switching Regulator</b>                                       |  |  | Engineer : <b>Günce Akkoyun</b> | <b>Ovoo Electronics</b><br>Askan Mah. Ortairmak Sok.<br>Birgül Apt. 19/6<br>Meram / Konya Türkiye |  |
| Customer : <b>STF Irrigation</b>                                     |  |  | Product ID : -                  |   |   |
| Module ID : <b>B100BA</b>  |  |  | Version : <b>R1</b>             |   |   |
| Date : <b>11.08.2021</b> Time : <b>11:44:35</b> Page : <b>7 / 10</b> |  |  | Revision : <b>00.00.01</b>      |   |   |
| File : <b>3V3 Switching Regulator.SchDoc</b>                         |  |  |                                 |   |   |


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### DC Power Input Sockets



www.github.com/akkoyun/B100BA

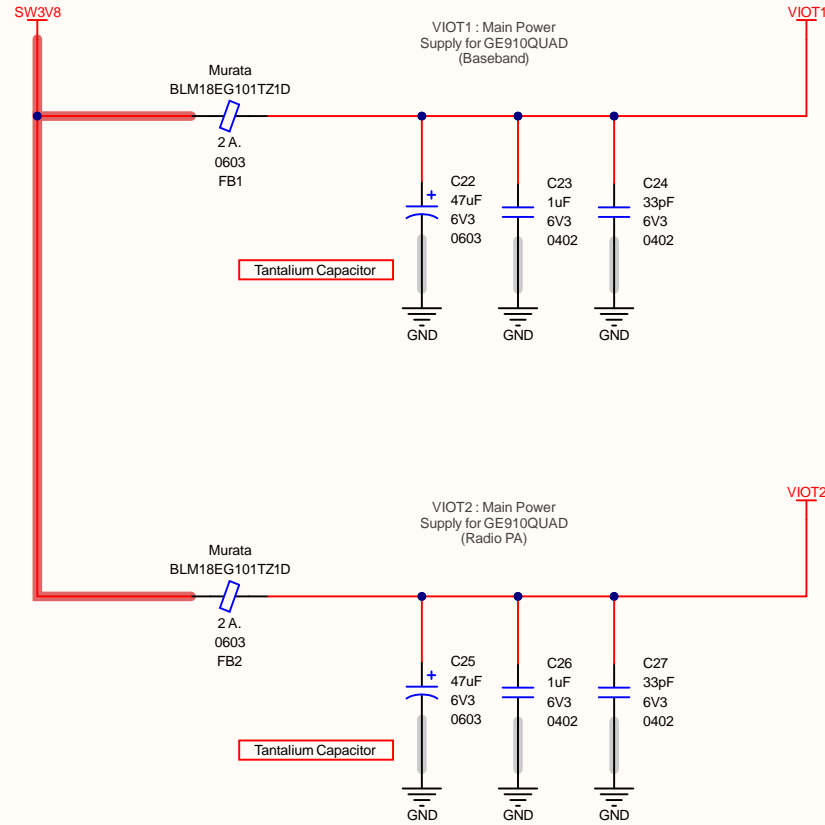
| VDC Input Sockets |                               |           | Engineer : | Güncé Akkoyun | Ovoo Electronics | Askan Mah. Ortairmak Sok.<br>Birgül Apt. 19/6<br>Meram / Konya Türkiye |  |
|-------------------|-------------------------------|-----------|------------|---------------|------------------|--|---|
| Size :            | A4                            | Project : | B100BA     | Customer :    |                  |  |   |
| Date :            | 11.08.2021                    | Time :    | 11:44:35   | Product ID :  | -                |  |   |
| File :            | DC Power Input Sockets.SchDoc | Page :    | 8 / 10     | Module ID :   | B100BA           |  |   |
|                   |                               |           |            | Version :     | R1               |  |   |
|                   |                               |           |            | Revision :    | 00.00.01         |  |   |



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### GSM IoT Power Filter



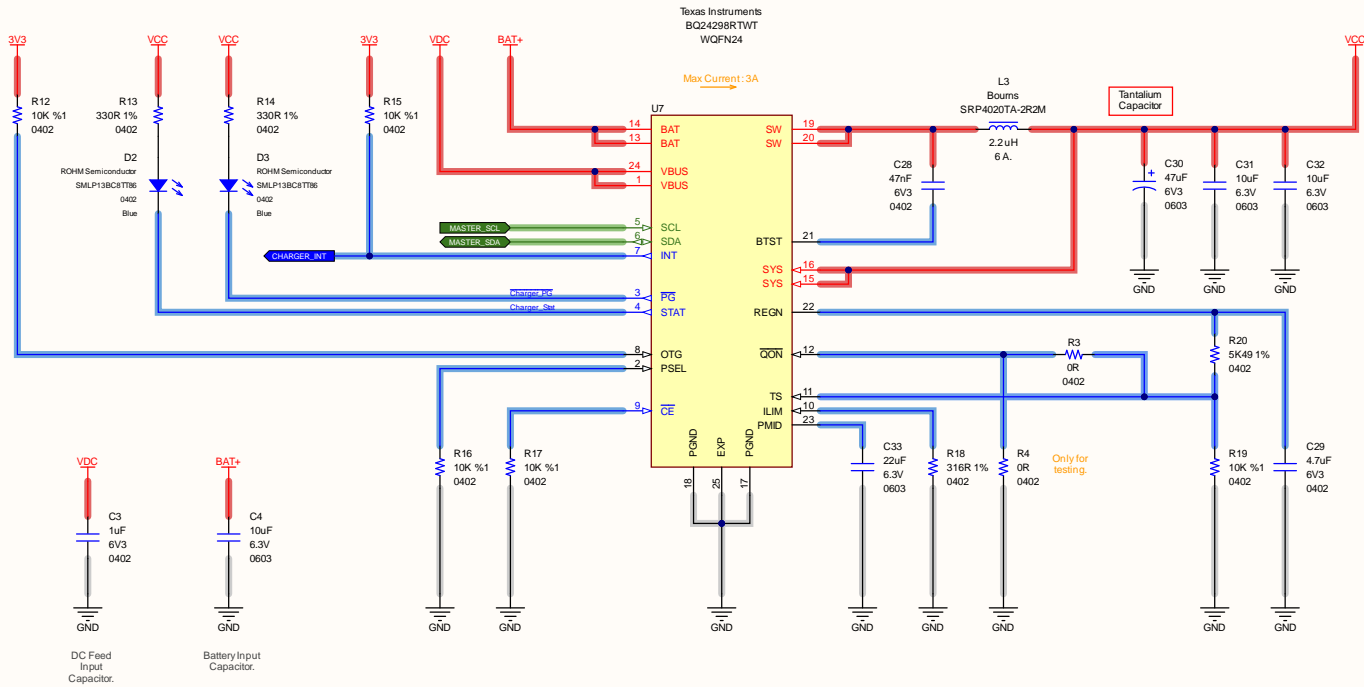
V10T is used for powering Telit GE910QUAD. GSM modem have a 2A peak current and 300mA continuous current.

[www.github.com/akkoyun/B100BA](http://www.github.com/akkoyun/B100BA)

| GSM IoT Power Filter                               |                         |                      | Engineer : <a href="#">Günce Akkoyun</a>  | <b>Ovoo Electronics</b><br>Askan Mah. Ortairmak Sok.<br>Birgül Apt. 19/6<br>Meram / Konya Türkiye |
|--|-------------------------|----------------------|---|---|
| Size : <b>A4</b>                                   | Project : <b>B100BA</b> |                      | Customer : <a href="#">STF Irrigation</a> |   |
| Date : <b>11.08.2021</b>                           | Time : <b>11:44:35</b>  | Page : <b>9 / 10</b> | Product ID : -                            |   |
| File : <a href="#">GSM IoT Power Filter.SchDoc</a> |                         |                      | Module ID : <b>B100BA</b>                 |   |
|  |                         |                      | Version : <b>R1</b>                       |   |
|  |                         |                      | Revision : <b>00.00.01</b>                |   |



Battery Charger



|                              |                 |  |   |  |
|------------------------------|-----------------|--|---|--|
| <b>Battery Charger</b>       |                 | Engineer: <a href="#">Gunce Akkoyun</a>  | <b>Ovoo Electronics</b><br>Askan Mah. Ortairmak Sok.<br>Birgul Apt. 19/6<br>Meram / Konya Türkiye |  |
| Size: A3                     | Project: B100BA | Customer: <a href="#">STF Irrigation</a> |   |  |
| Date: 11.08.2021             | Time: 11:44:35  | Product ID: -                            |   |  |
| File: Battery Charger.SchDoc | Page: 10 / 10   | Module ID: <a href="#">B100BA</a>        |   |  |
|                              |                 | Version: R1                              |   |  |
|                              |                 | Revision: 00.00.01                       |   |  |