

# Preliminary

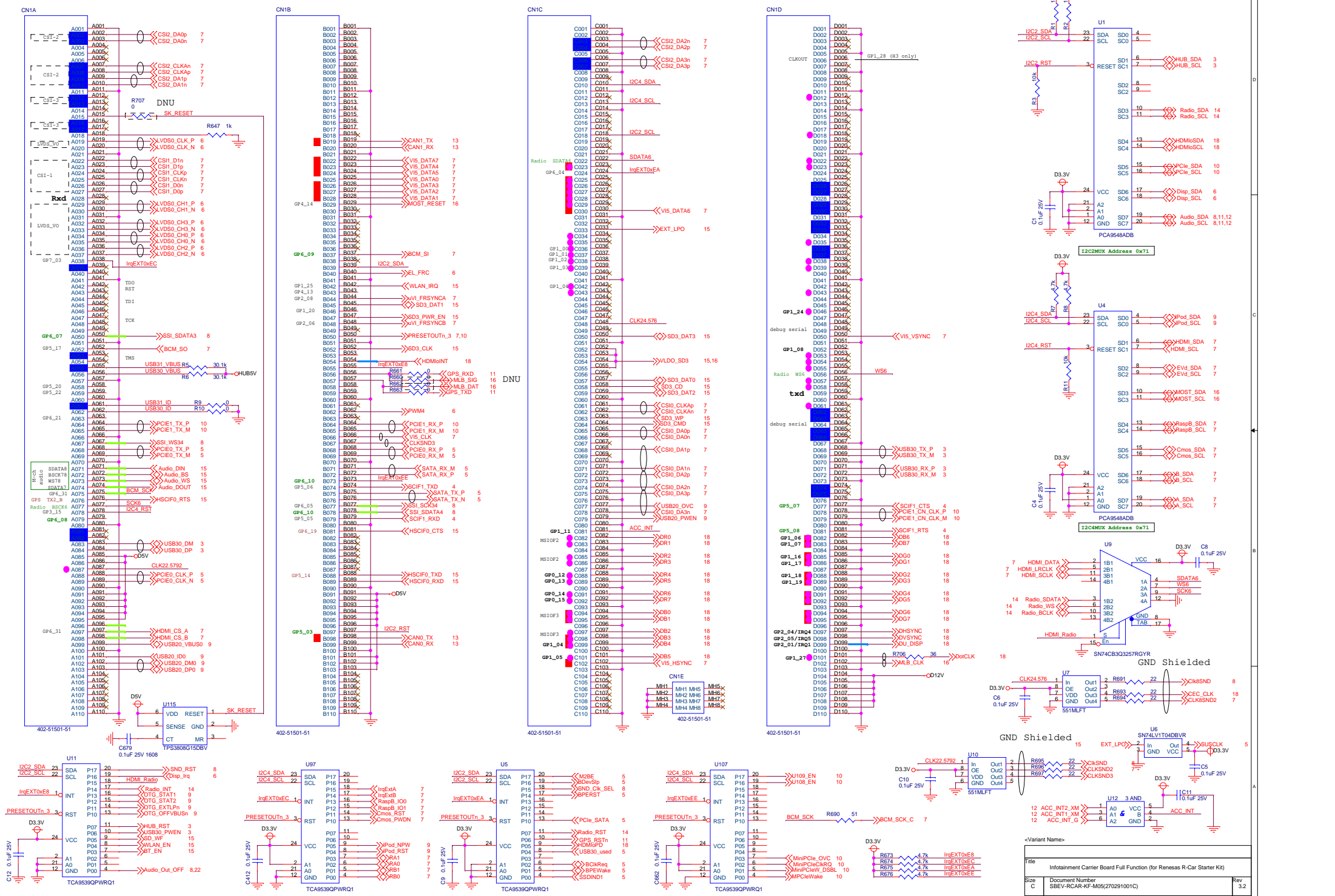
## Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) for R-CarH3/M3-SiP System Board SBEV-RCAR-KF-M05

- 01 TOC
- 02 ULCB PORTS
- 03 USB HUB
- 04 COM PORT
- 05 M.2 Key M
- 06 VIDEO OUTPUT
- 07 VIDEO INPUT
- 08 AUDIO INPUT/OUTPUT
- 09 APPLE CARPLAY
- 10 MiniPCIe
- 11 GPS
- 12 GYRO
- 13 CAN IF
- 14 RADIO
- 15 SDHCI WIFI/BT
- 16 MOST IF
- 17 POWER
- 18 Auxiliary HDMI Output
- 19-21 Audio analog Inputs
- 22-25 Audio analog Output

<Variant Name>

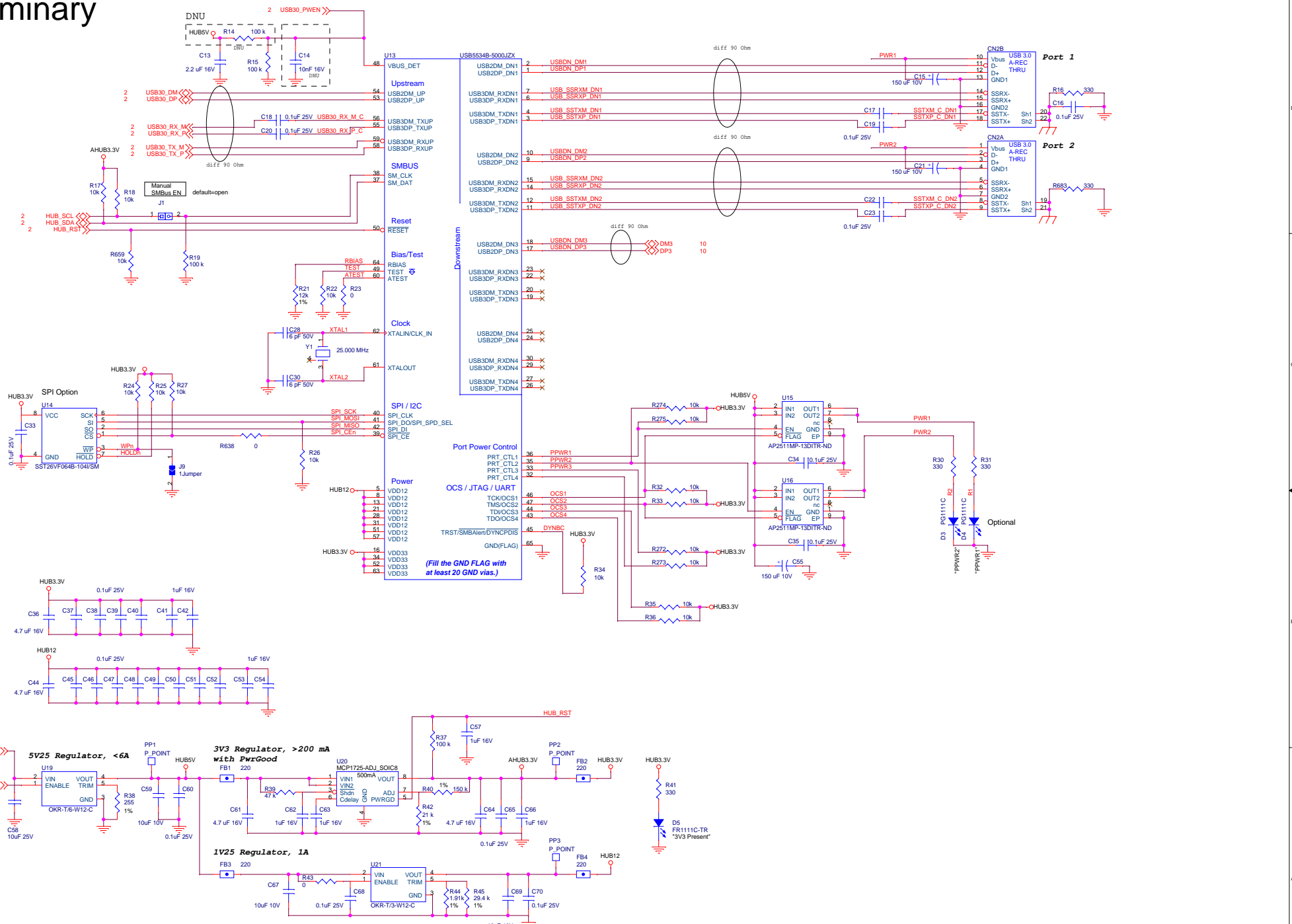
|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.2           |
| Date:  | Friday, July 13, 2018        | Sheet 1 of 25 |

# Preliminary



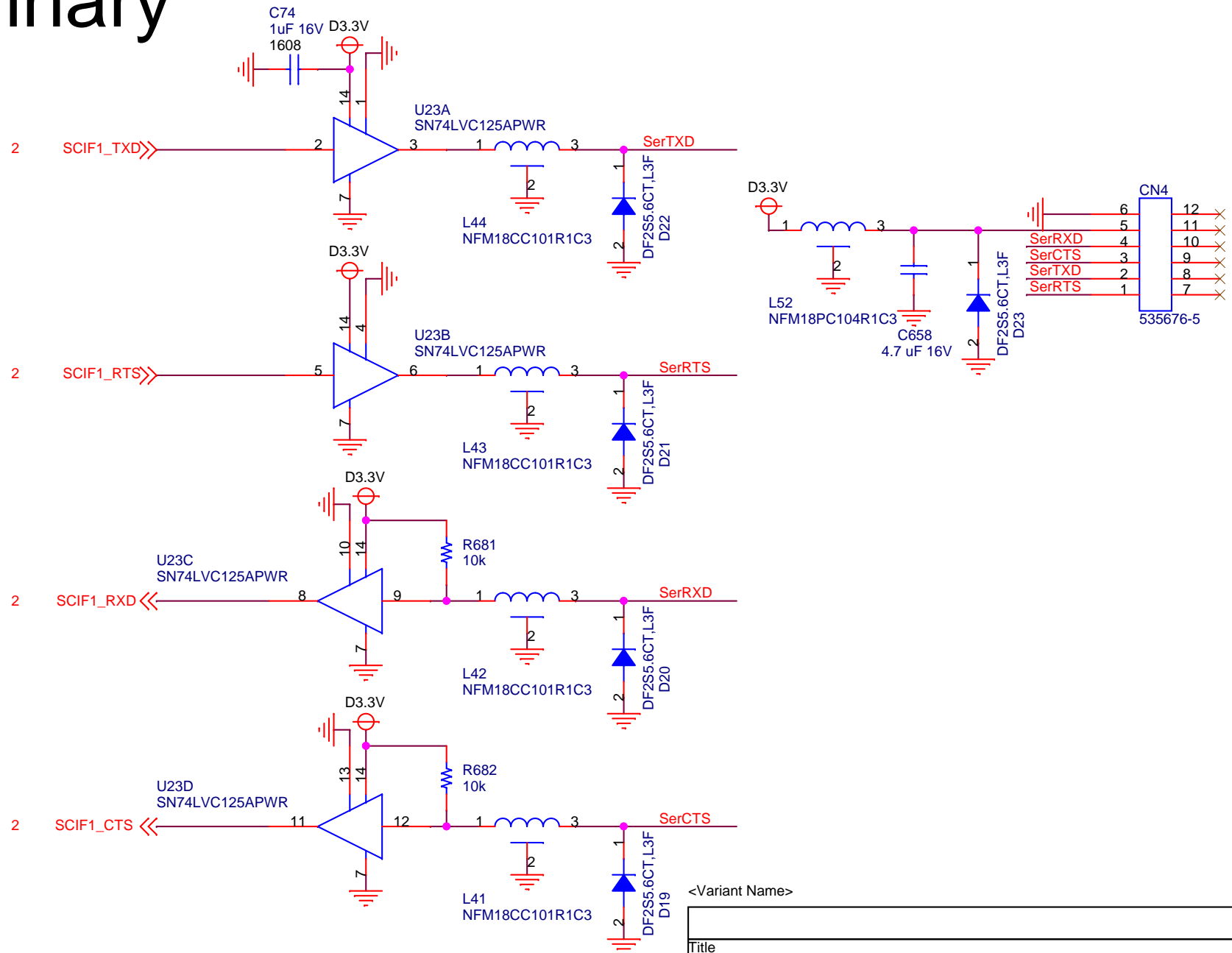
| File   | Infocainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |
|--------|--|------------------------------|
| Size C | Document Number  | SBEV-RCAR-KF-M05(2/2021001C) |
| Date   | Friday, July 13, 2018  | Sheet 2 of 25                |

# Preliminary



|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| C  | SBEV-RCAR-KF-M05(270291001C) | 3.1           |
| Date:  | Friday, July 13, 2018        | Sheet 3 of 25 |

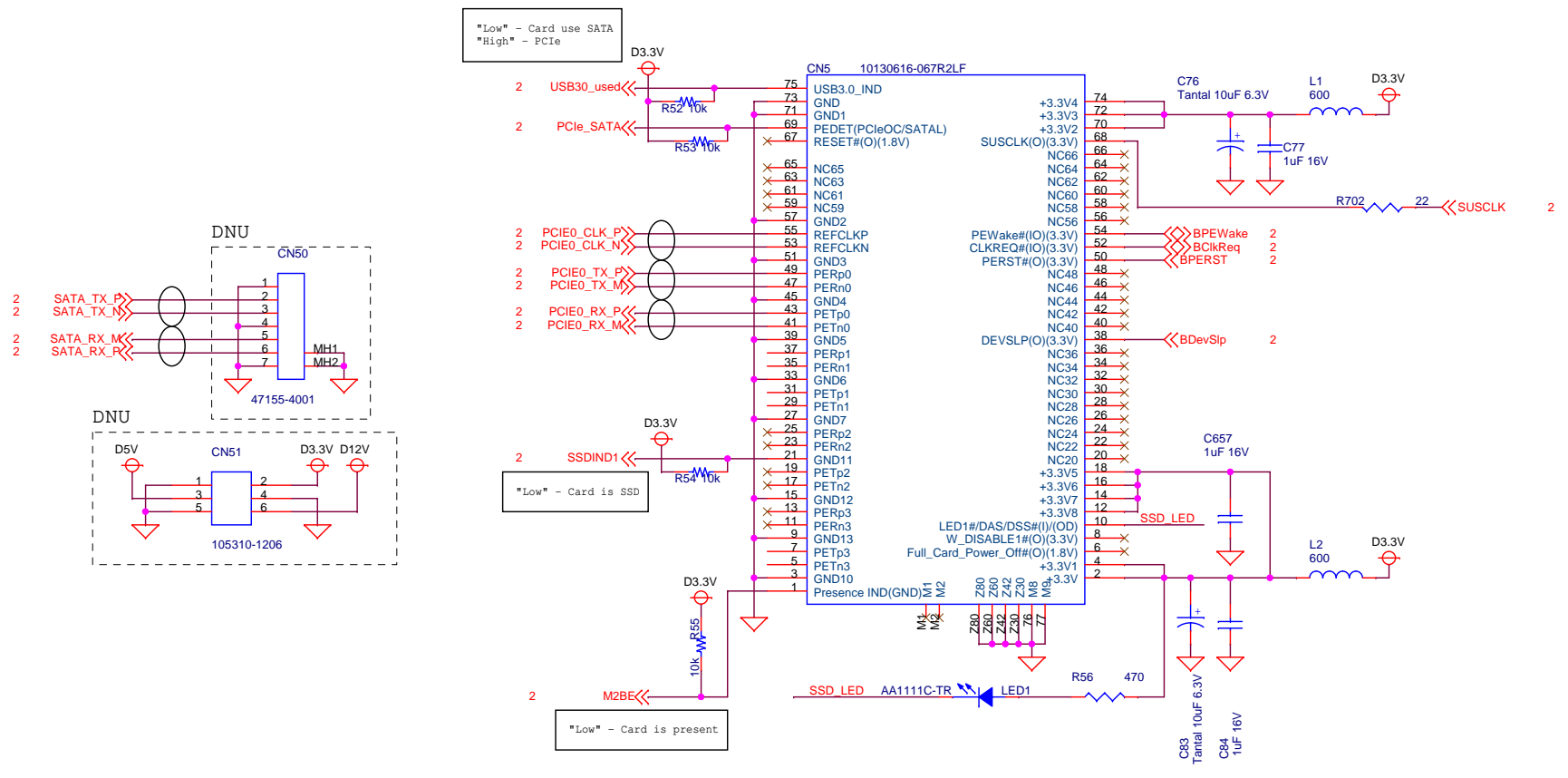
# Preliminary



<Variant Name>

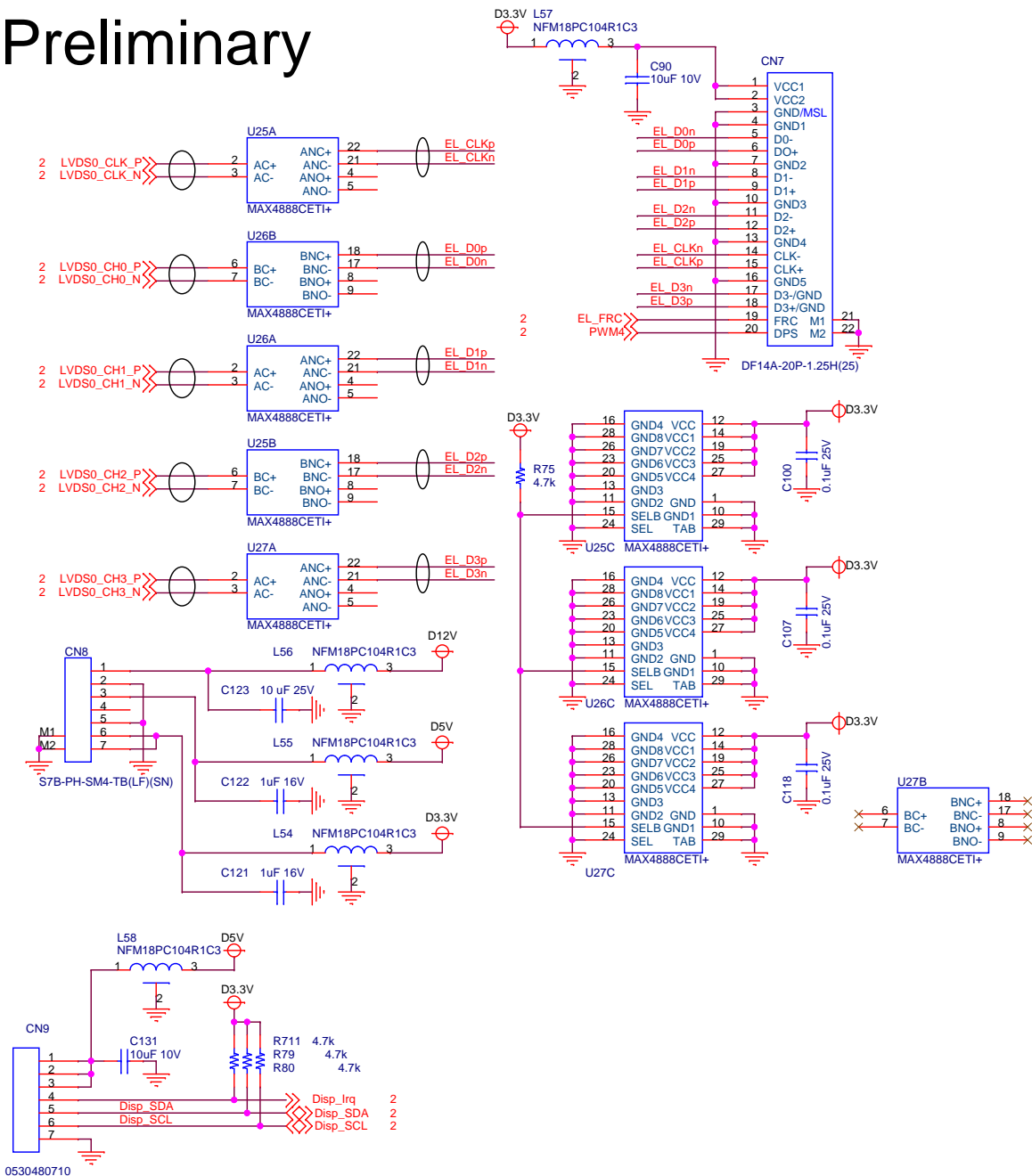
|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1           |
| Date:  | Friday, July 13, 2018        | Sheet 4 of 25 |

# Preliminary



|   |   |               |
|---|---|---------------|
| <Variant Name>  |   |               |
| Title<br>Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |   |               |
| Size<br>B   | Document Number<br>SBEV-RCAR-KF-M05(270291001C) | Rev<br>3.1    |
| Date:   | Friday, July 13, 2018                           | Sheet 5 of 25 |

# Preliminary

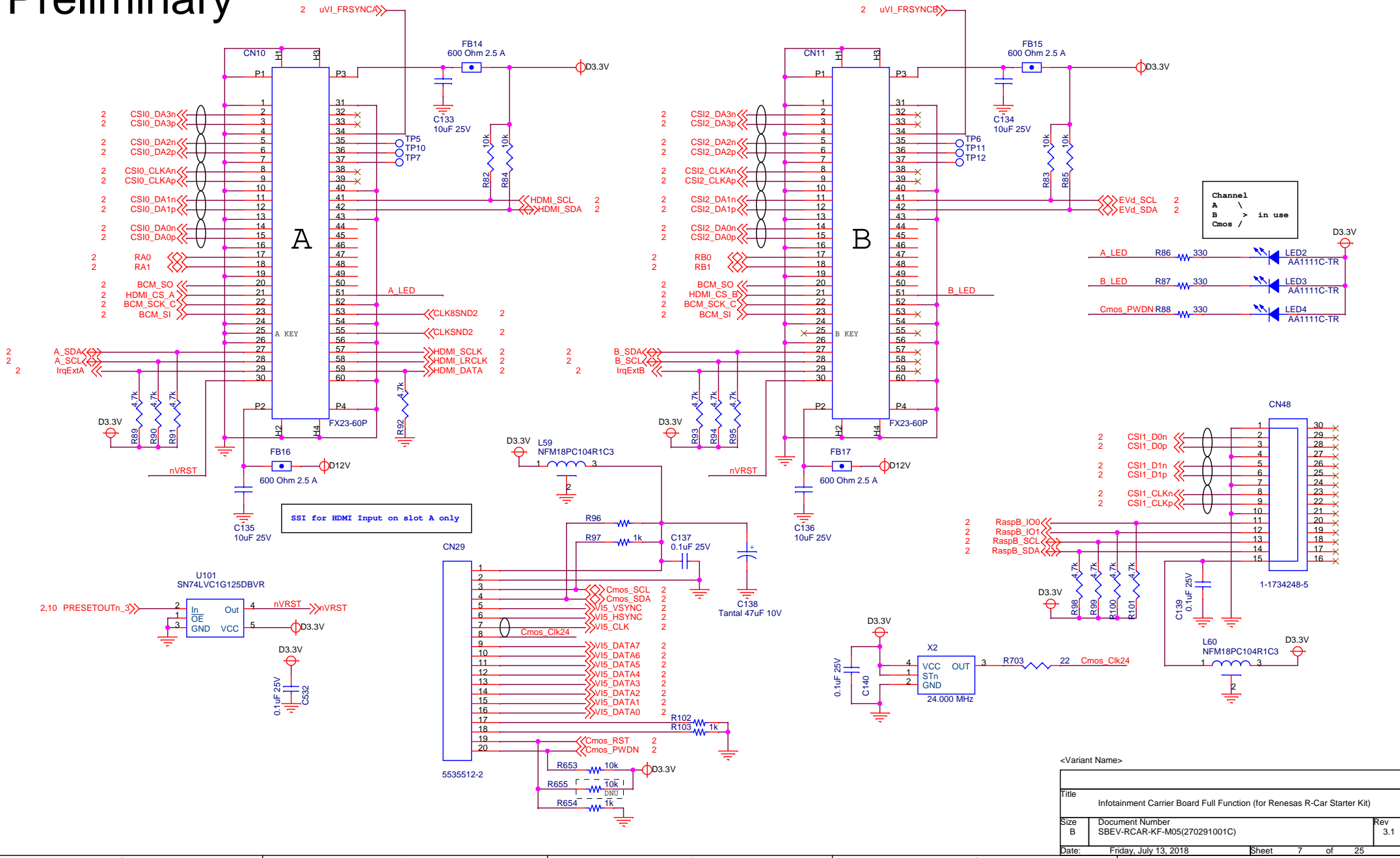


0530480710

<Variant Name>

|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1           |
| Date:  | Friday, July 13, 2018        | Sheet 6 of 25 |

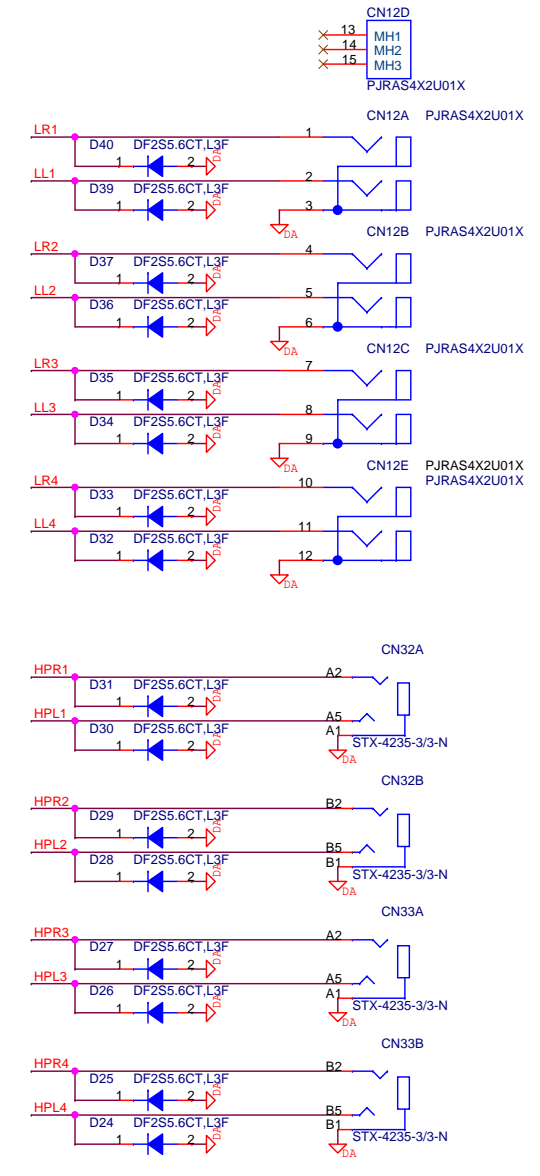
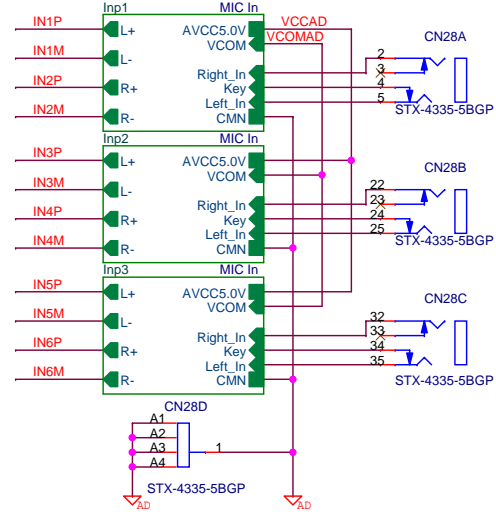
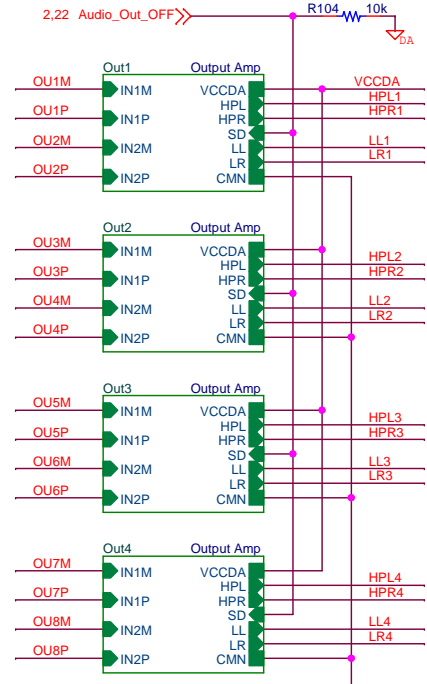
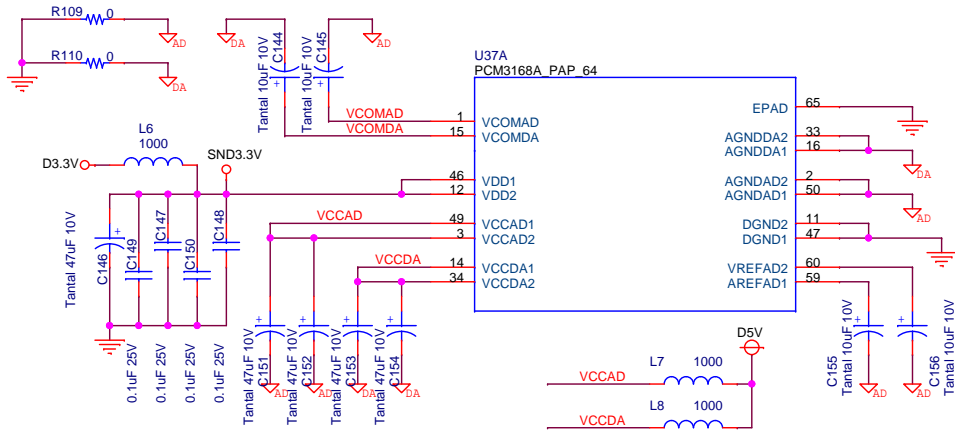
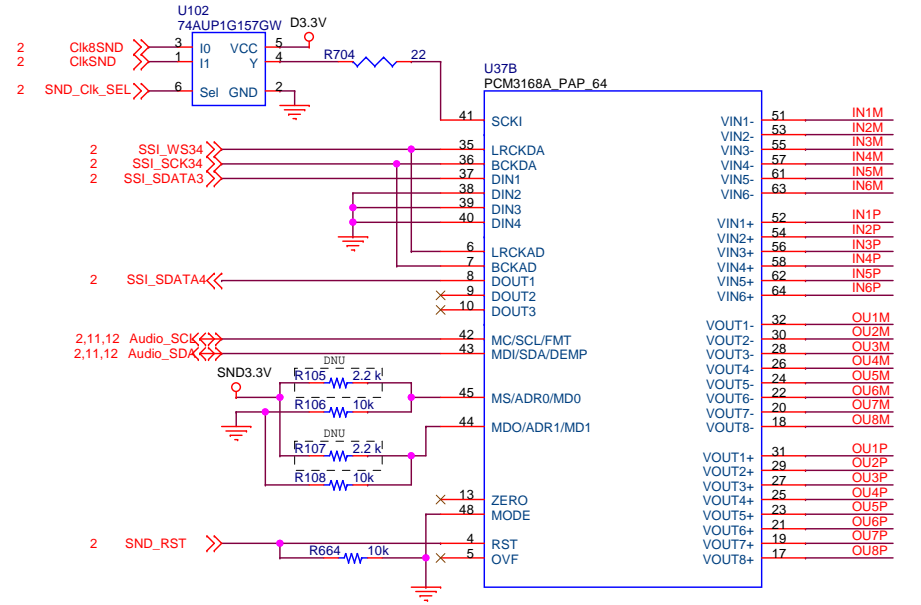
# Preliminary



<Variant Name>

|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1           |
| Date:  | Friday, July 13, 2018        | Sheet 7 of 25 |

# Preliminary



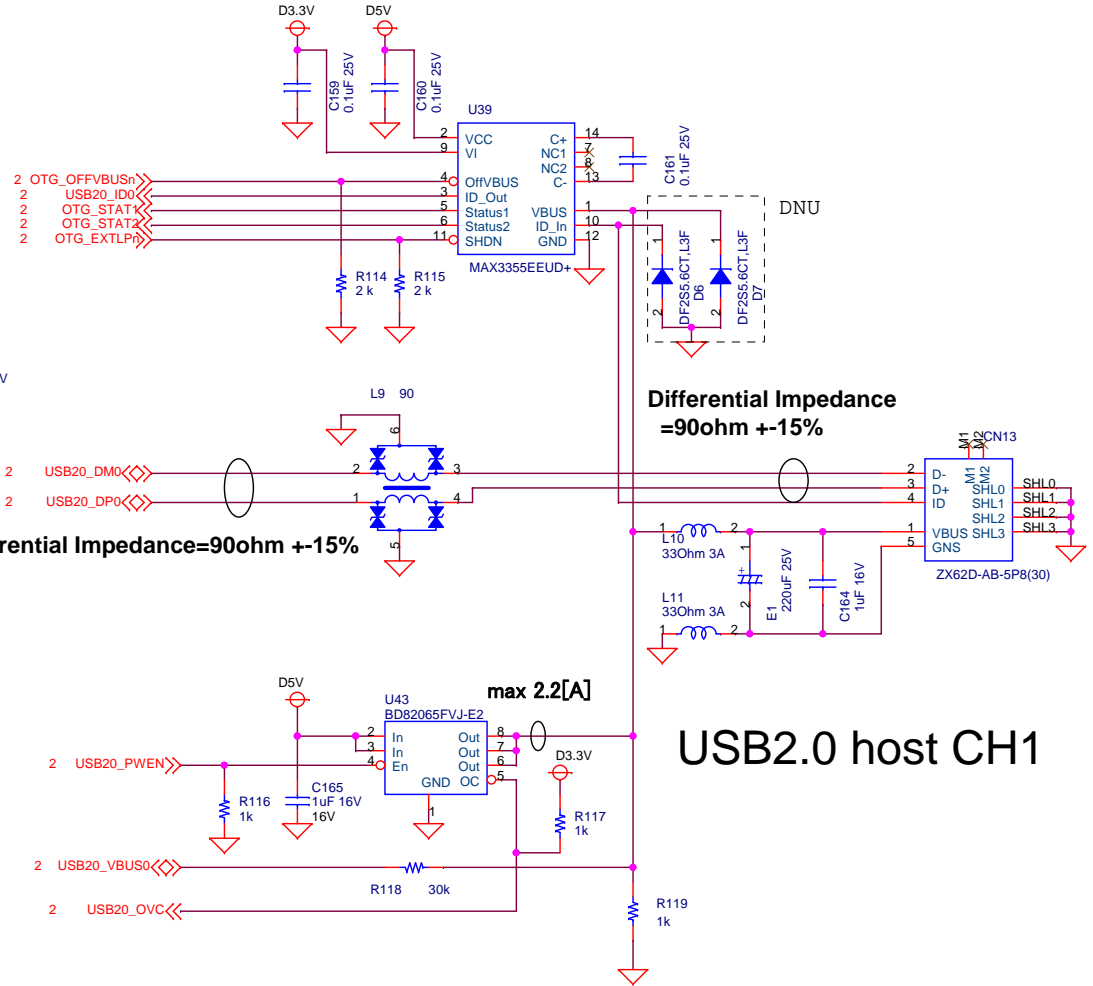
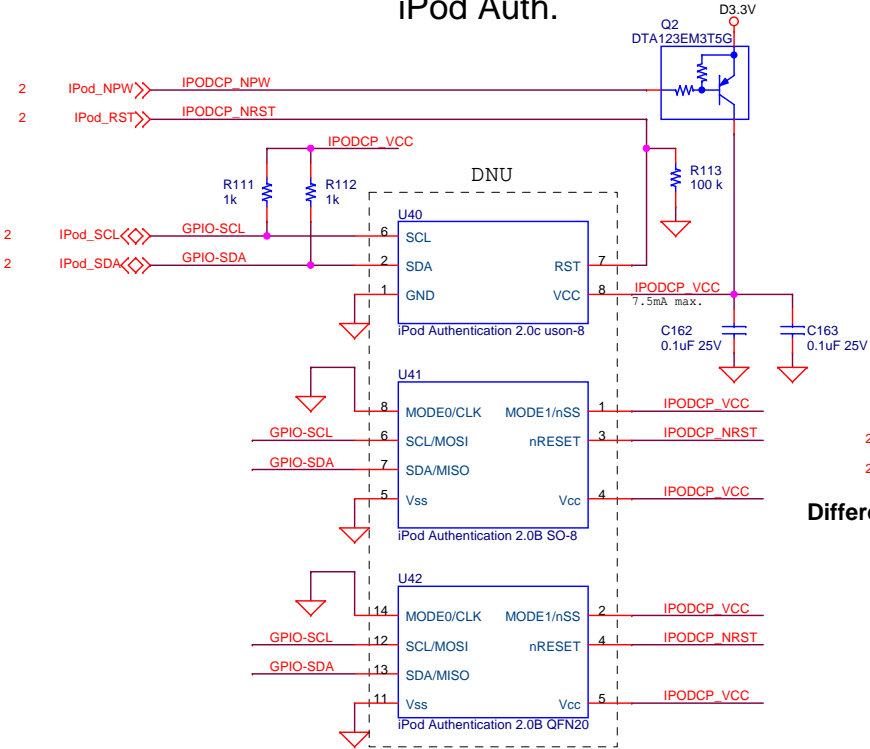
<Variant Name>

|  |                              |               |
|--|------------------------------|---------------|
| Title  |                              |               |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |               |
| Size   | Document Number              | Rev           |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1           |
| Date:  | Friday, July 13, 2018        | Sheet 8 of 25 |



# Preliminary

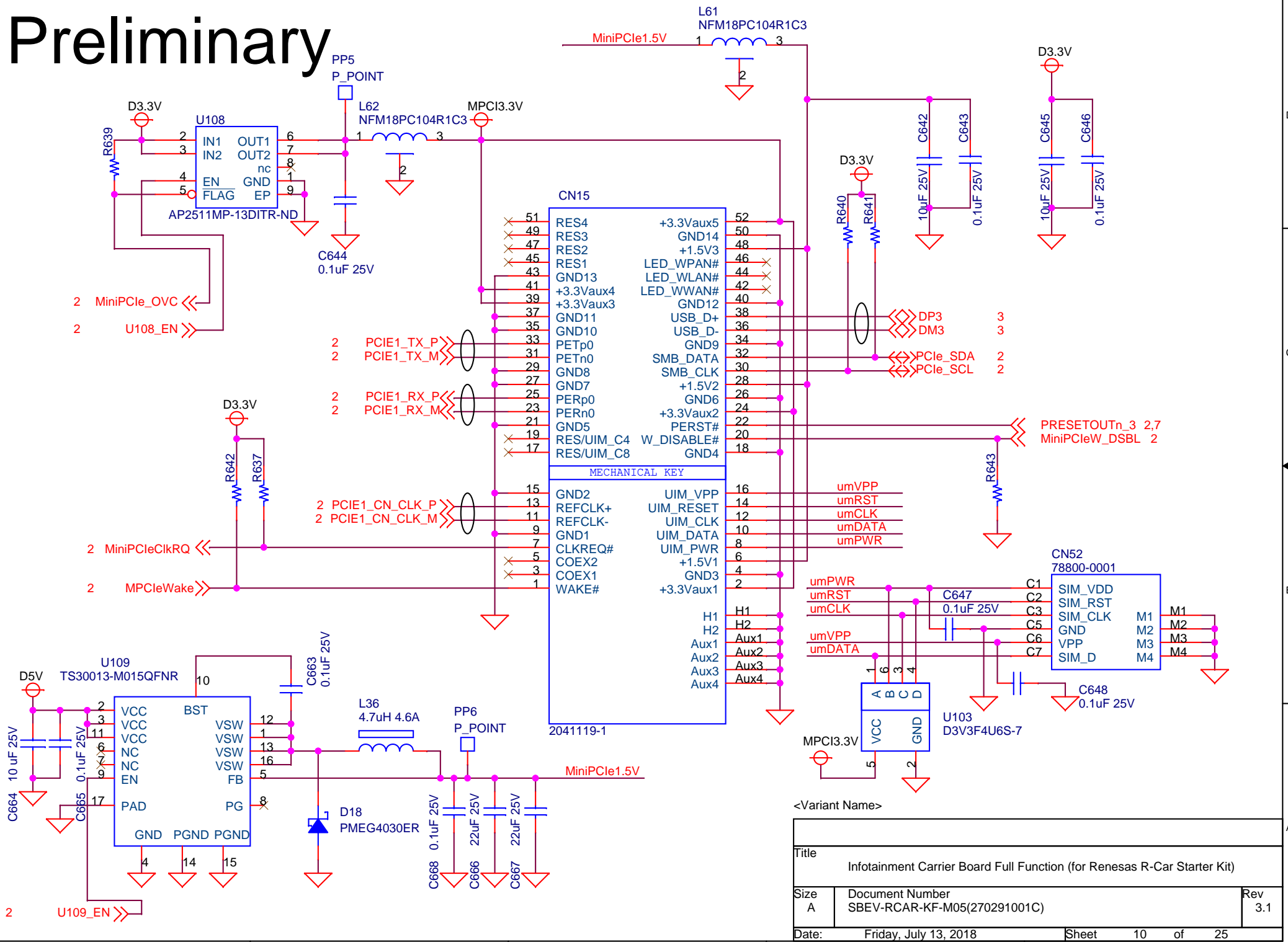
## iPod Auth.



## USB2.0 host CH1

|   |   |               |
|---|---|---------------|
| <Variant Name>  |   |               |
| Title<br>Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |   |               |
| Size<br>B   | Document Number<br>SBEV-RCAR-KF-M05(270291001C) | Rev<br>3.1    |
| Date:   | Friday, July 13, 2018                           | Sheet 9 of 25 |

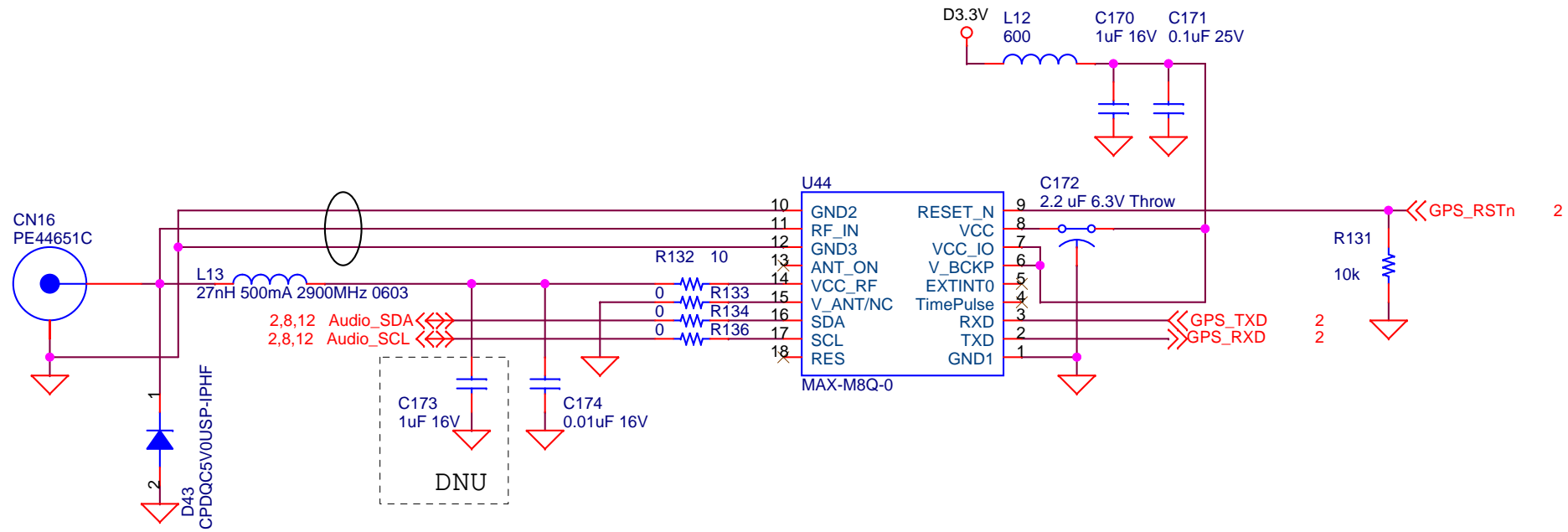
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 10 of 25 |

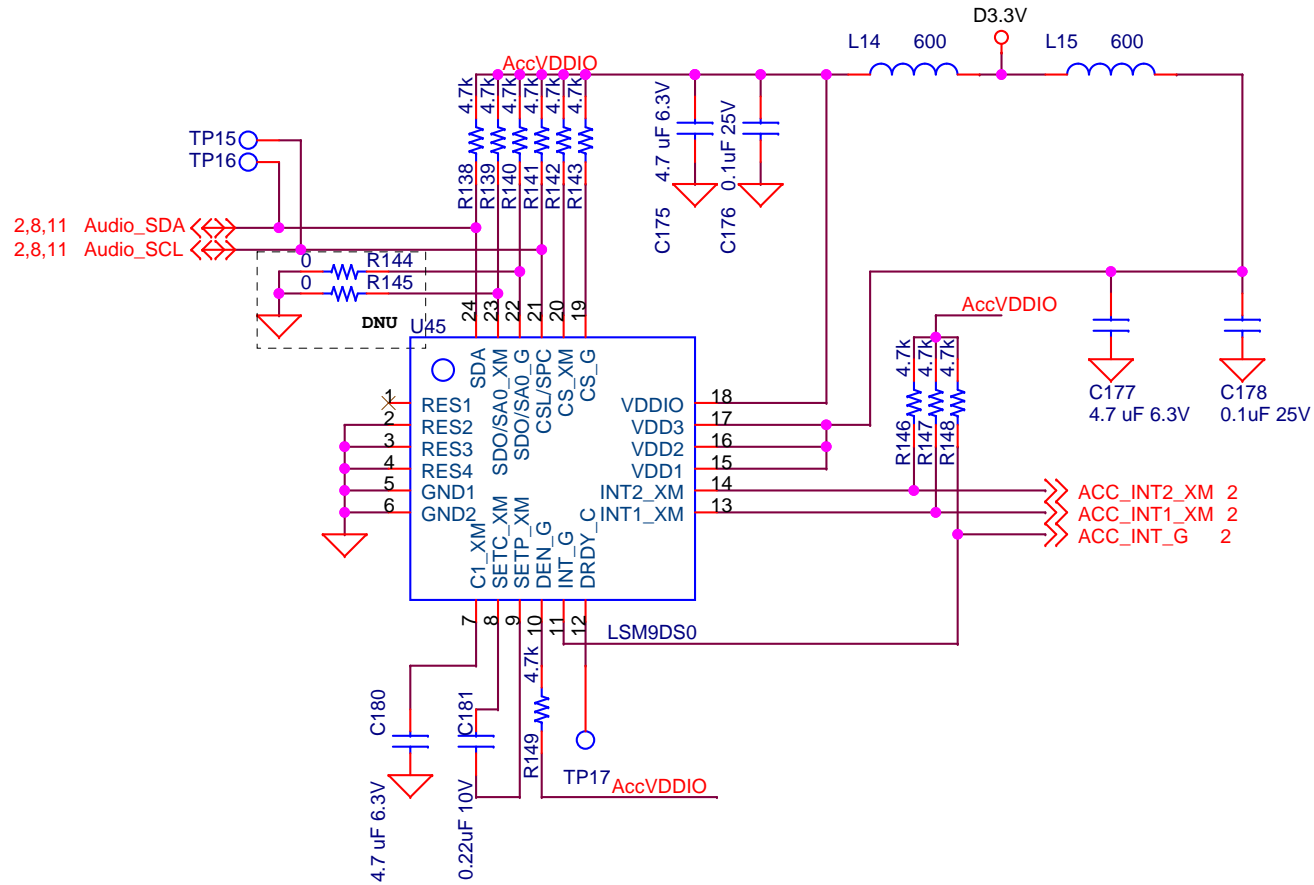
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 11 of 25 |

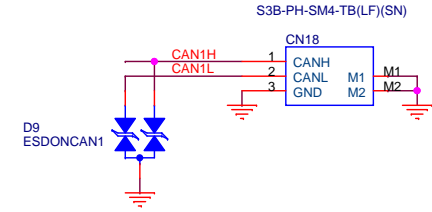
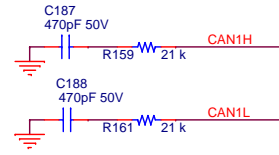
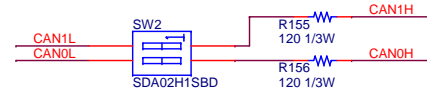
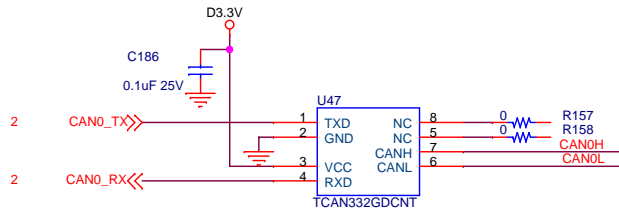
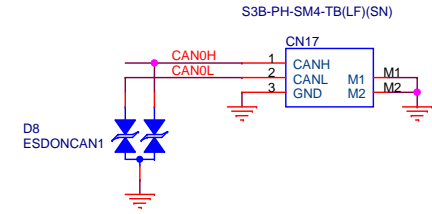
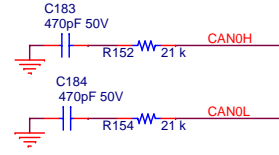
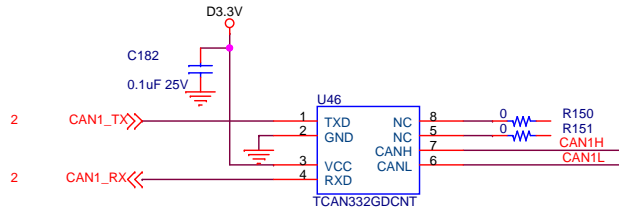
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 12 of 25 |

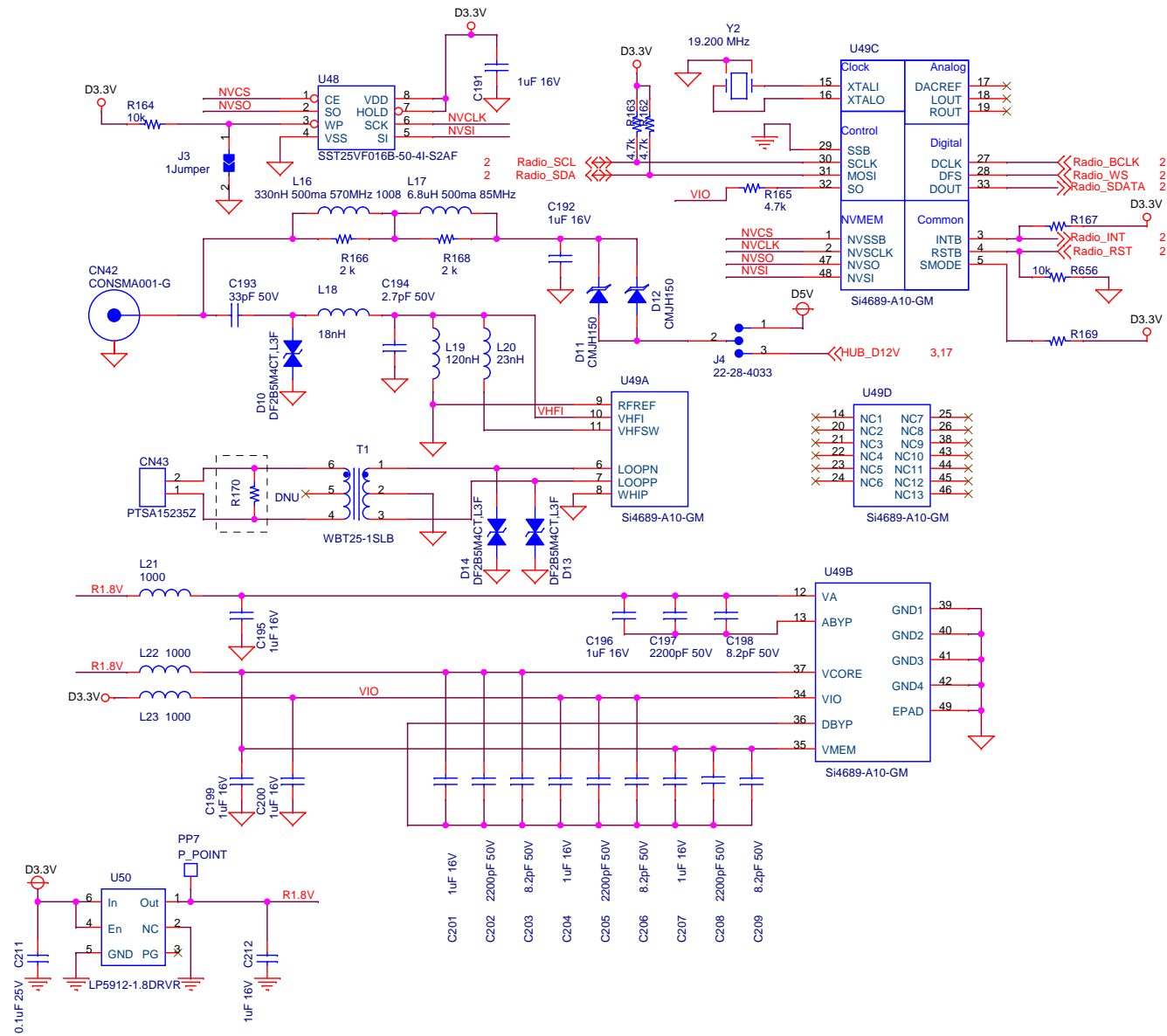
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 13 of 25 |

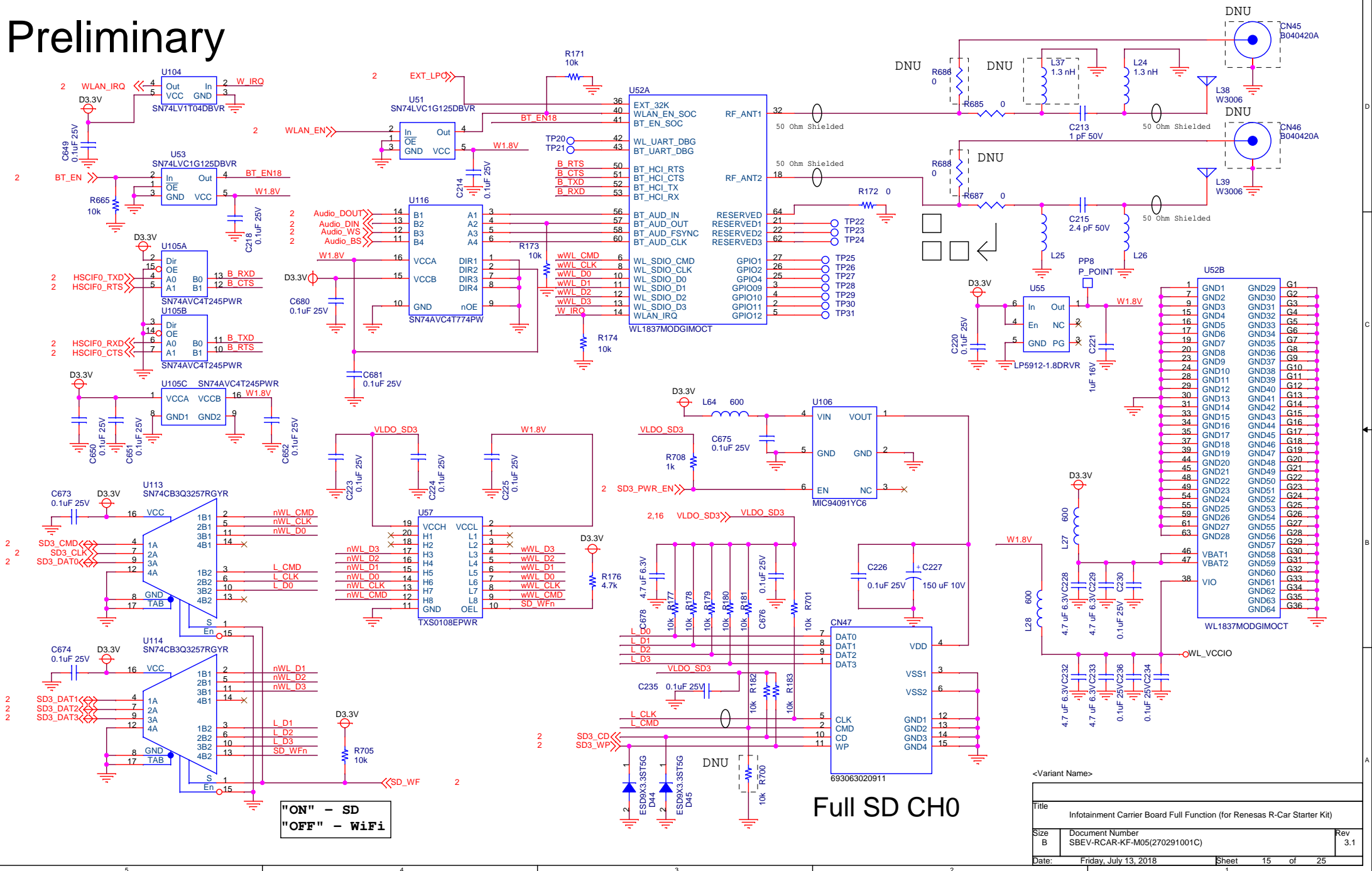
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 14 of 25 |

# Preliminary

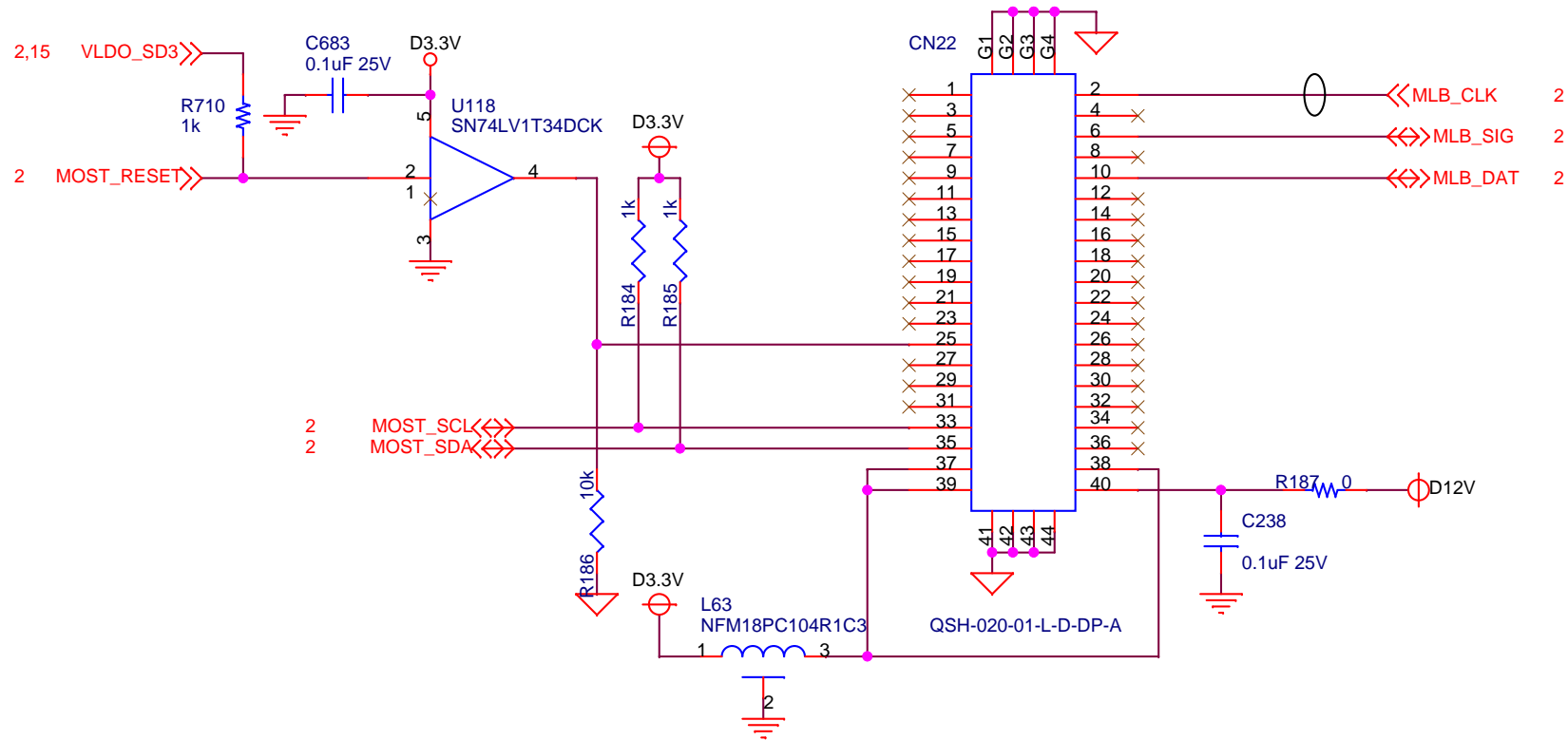


"ON" - SD  
"OFF" - Wi-Fi

Full SD CH0

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-CAR Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 15 of 25 |

# Preliminary

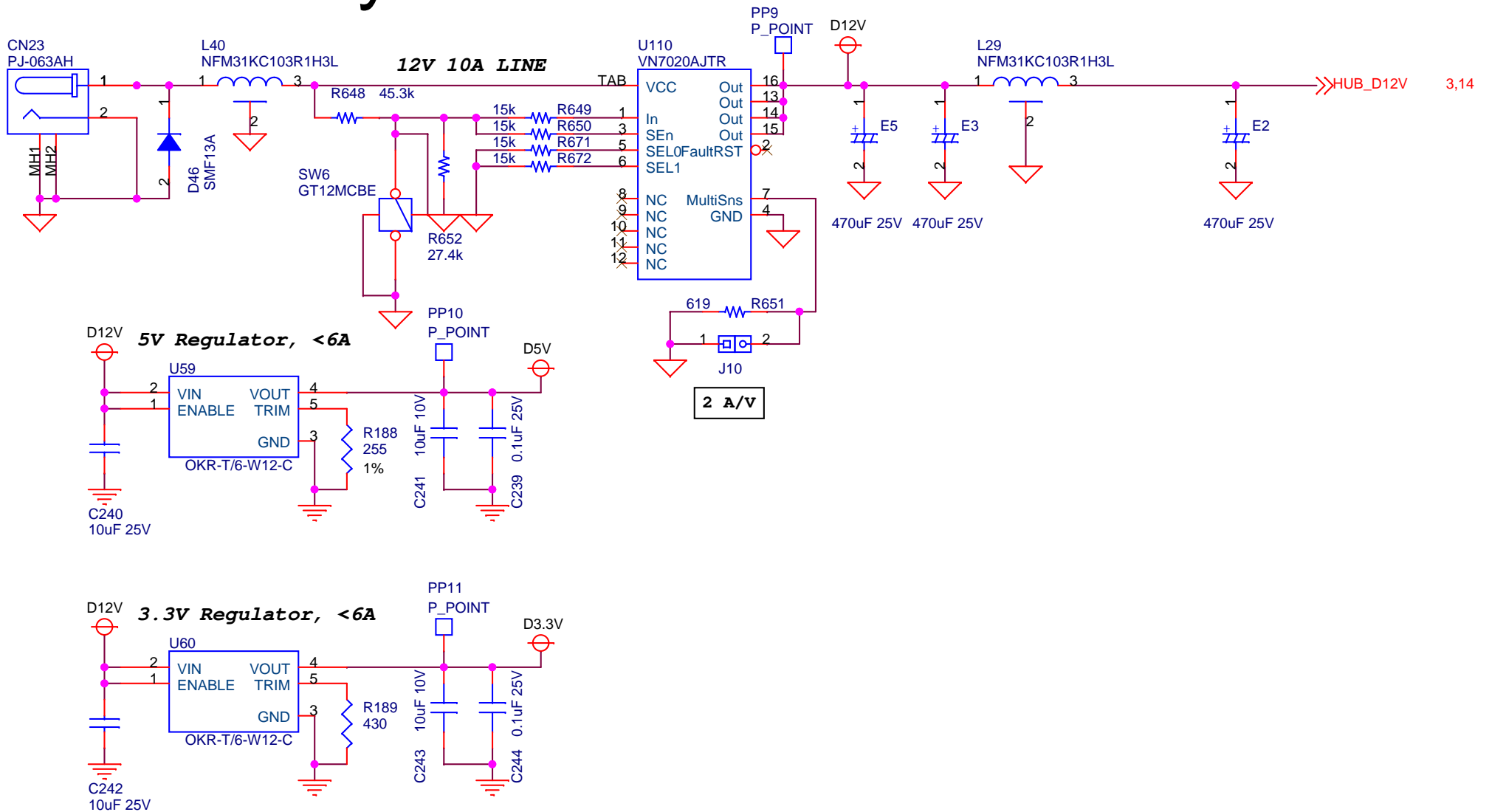


<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 16 of 25 |

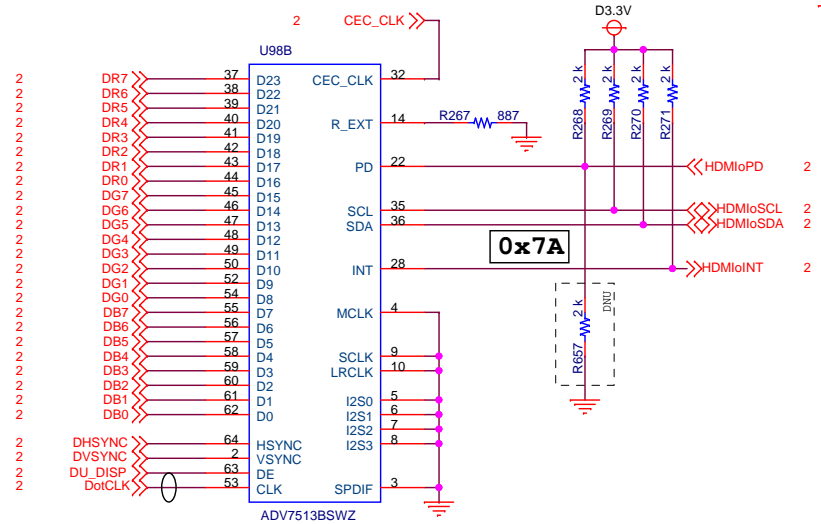
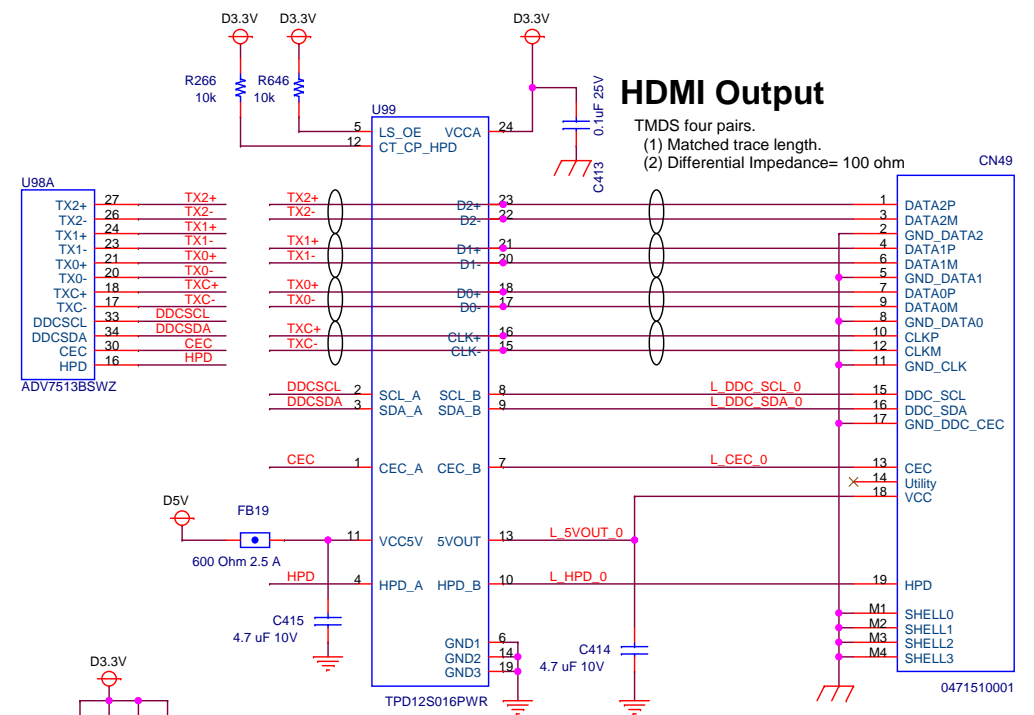
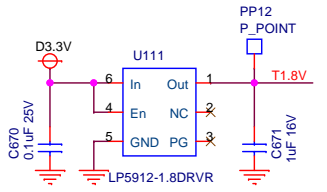
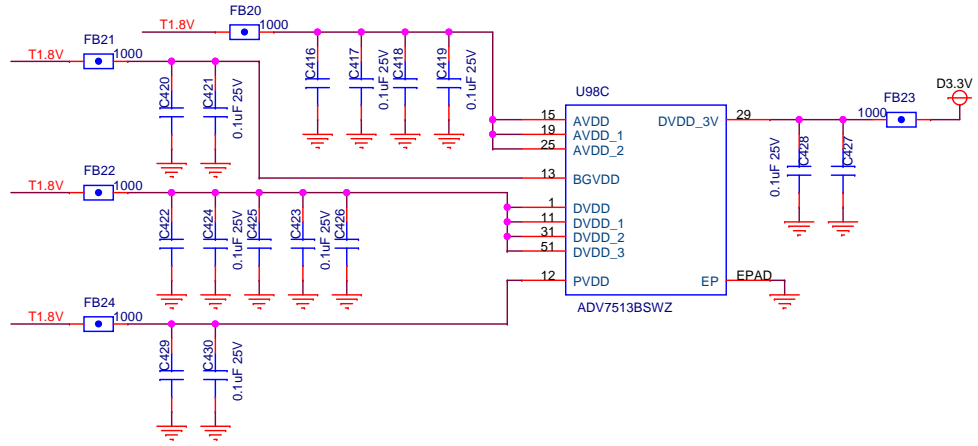


# Preliminary



<Variant Name>

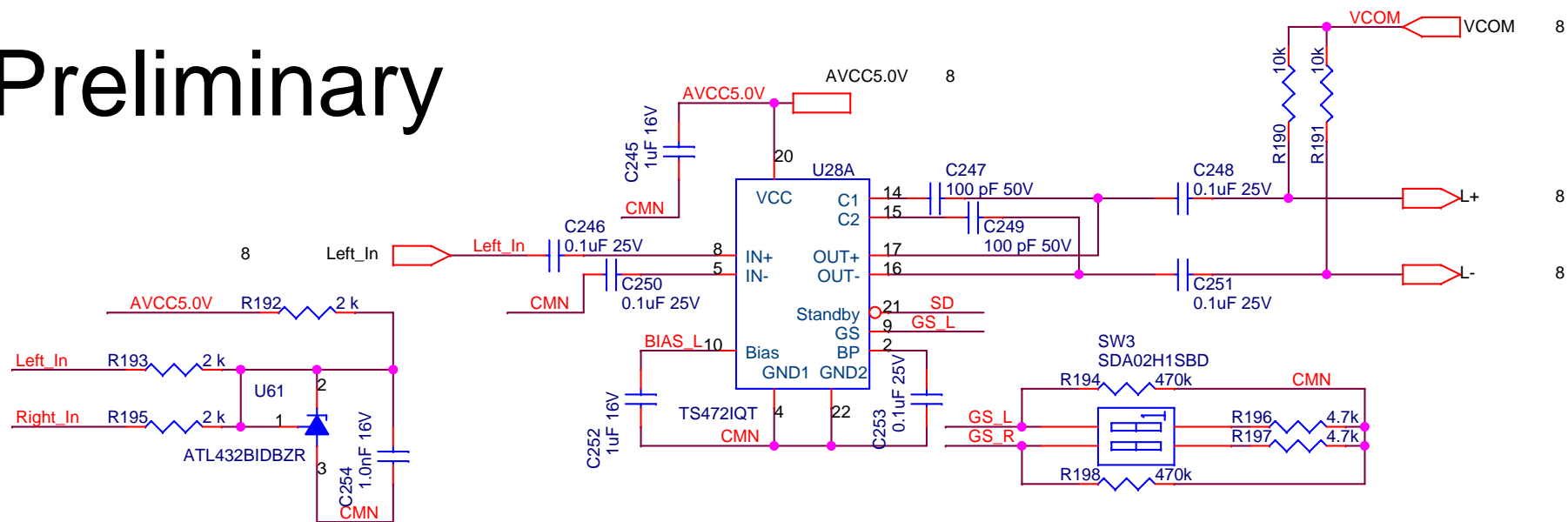
|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 17 of 25 |



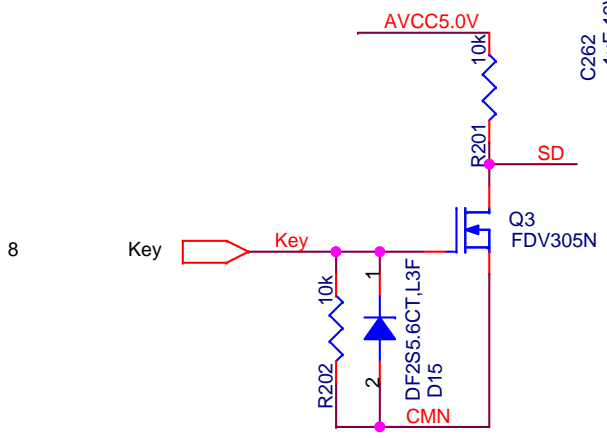
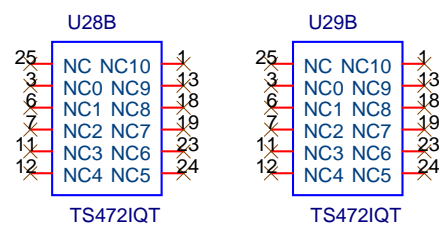
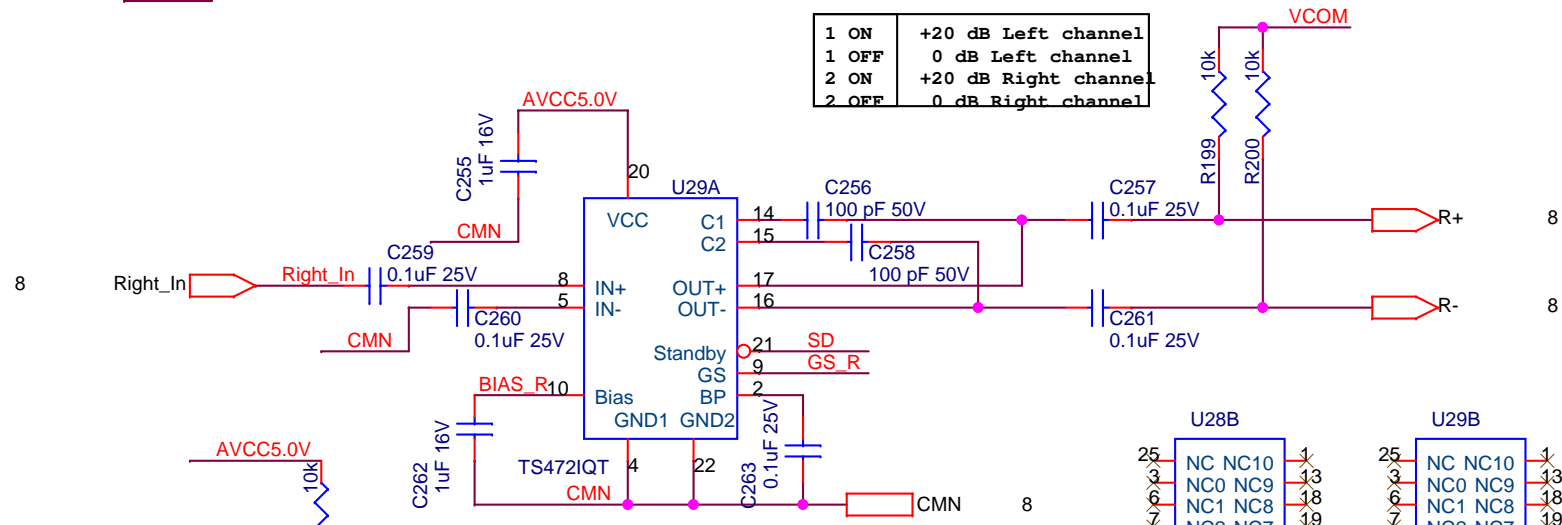
<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| B  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Friday, July 13, 2018        | Sheet 18 of 25 |

# Preliminary

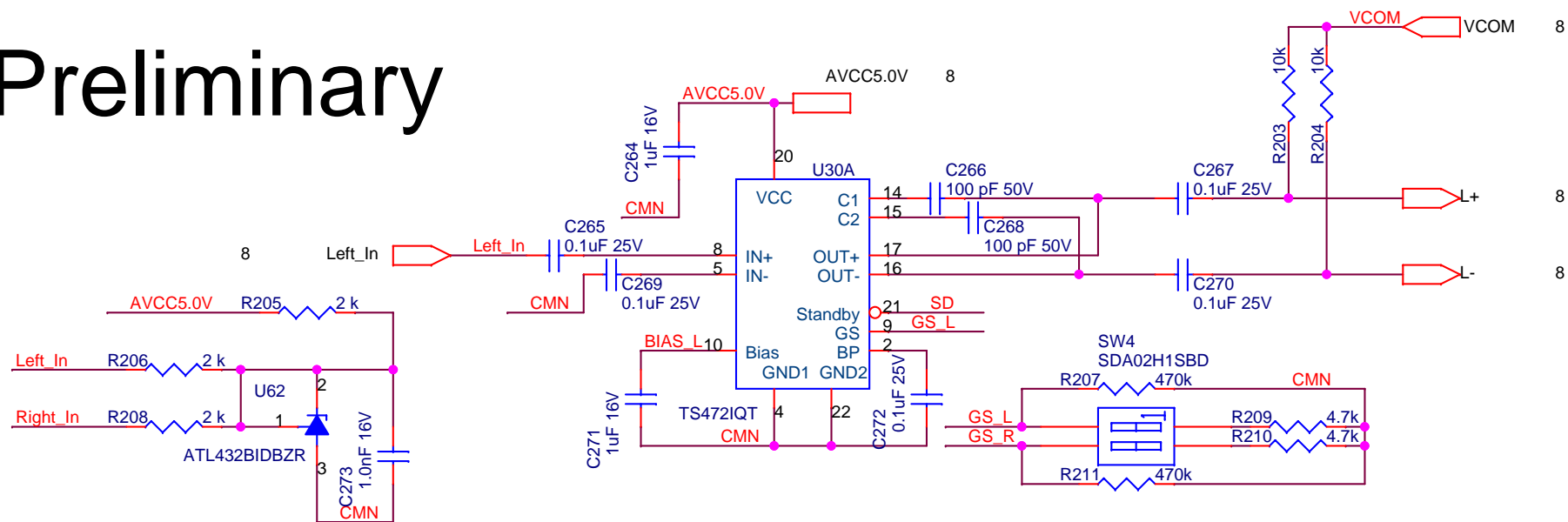


|       |                      |
|-------|----------------------|
| 1 ON  | +20 dB Left channel  |
| 1 OFF | 0 dB Left channel    |
| 2 ON  | +20 dB Right channel |
| 2 OFF | 0 dB Right channel   |

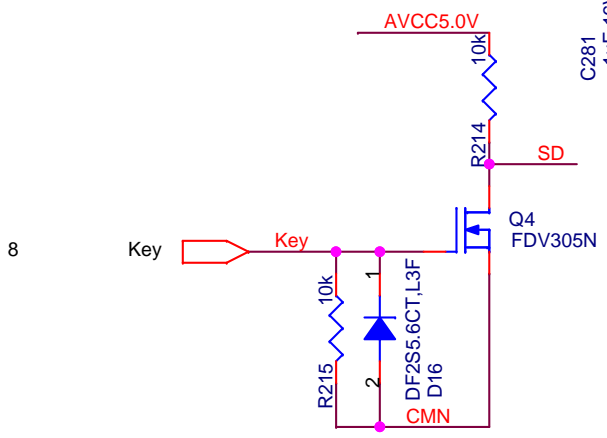
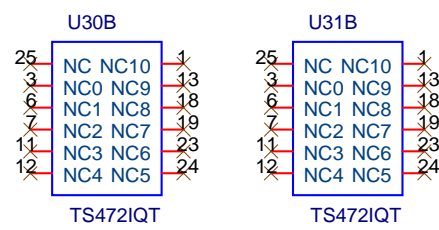
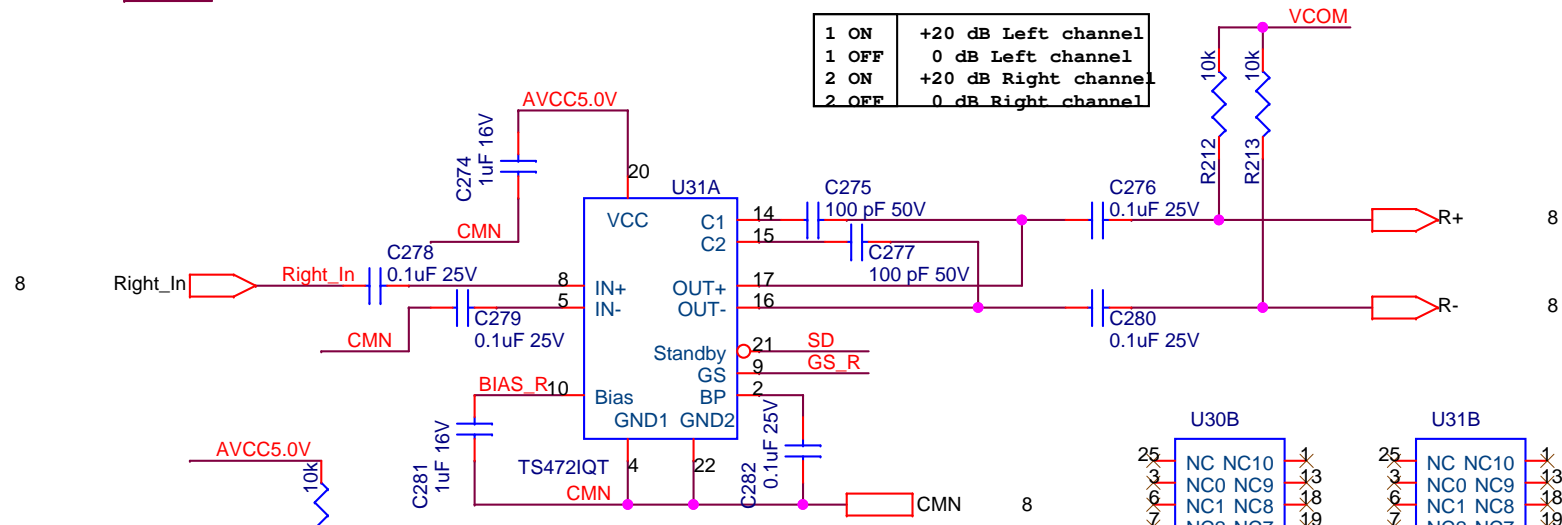


|   |   |                |
|---|---|----------------|
| <Variant Name>  |   |                |
| Title<br>Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |   |                |
| Size<br>A   | Document Number<br>SBEV-RCAR-KF-M05(270291001C) | Rev<br>3.1     |
| Date:   | Tuesday, January 30, 2018                       | Sheet 19 of 25 |

# Preliminary

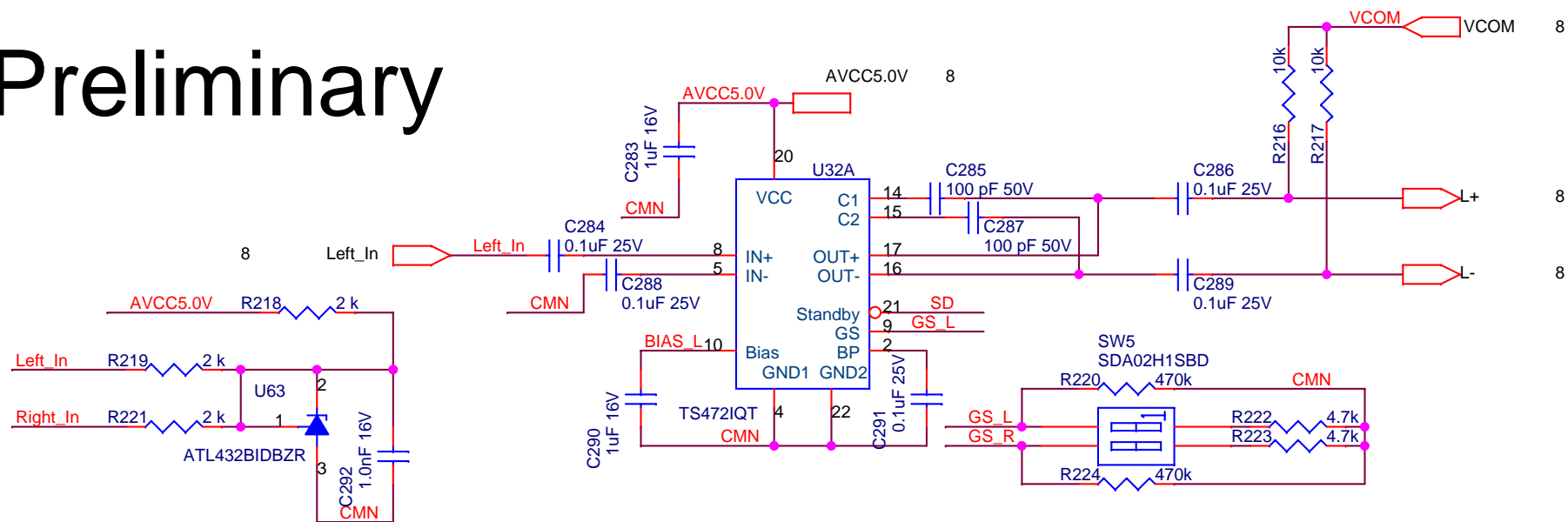


|       |                      |
|-------|----------------------|
| 1 ON  | +20 dB Left channel  |
| 1 OFF | 0 dB Left channel    |
| 2 ON  | +20 dB Right channel |
| 2 OFF | 0 dB Right channel   |

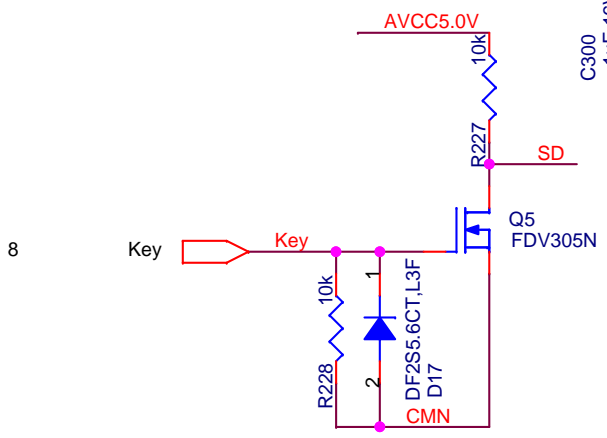
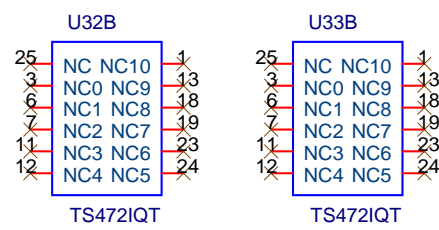
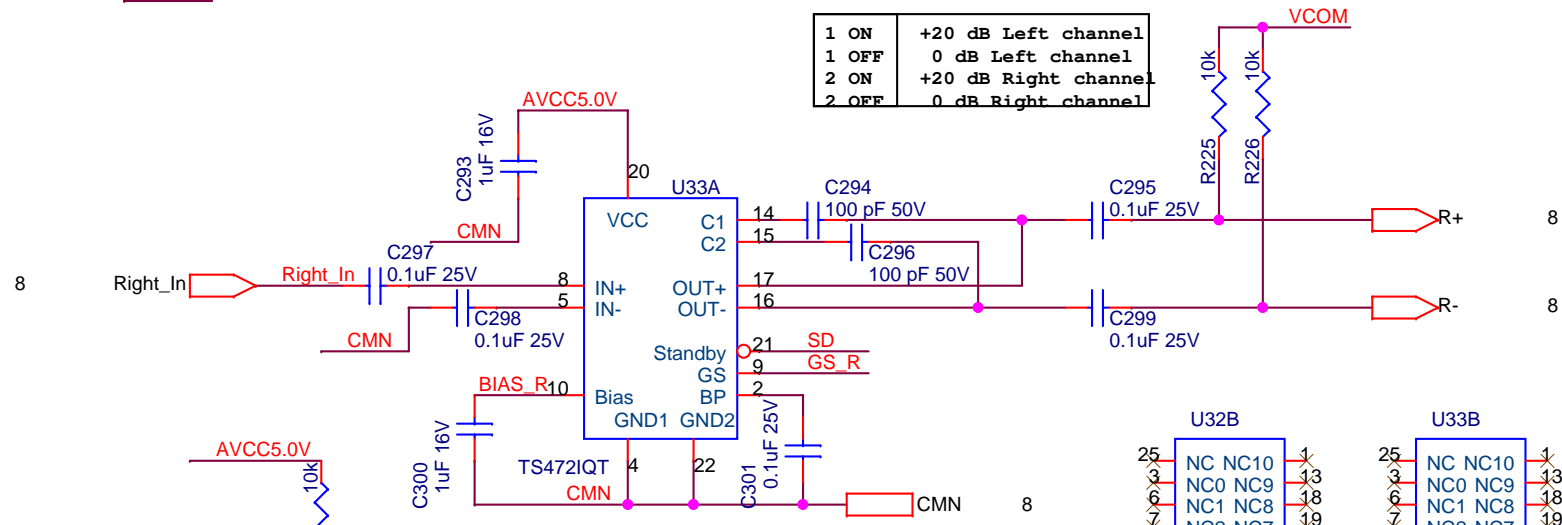


|   |   |                |
|---|---|----------------|
| <Variant Name>  |   |                |
| Title<br>Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |   |                |
| Size<br>A   | Document Number<br>SBEV-RCAR-KF-M05(270291001C) | Rev<br>3.1     |
| Date:   | Tuesday, January 30, 2018                       | Sheet 20 of 25 |

# Preliminary



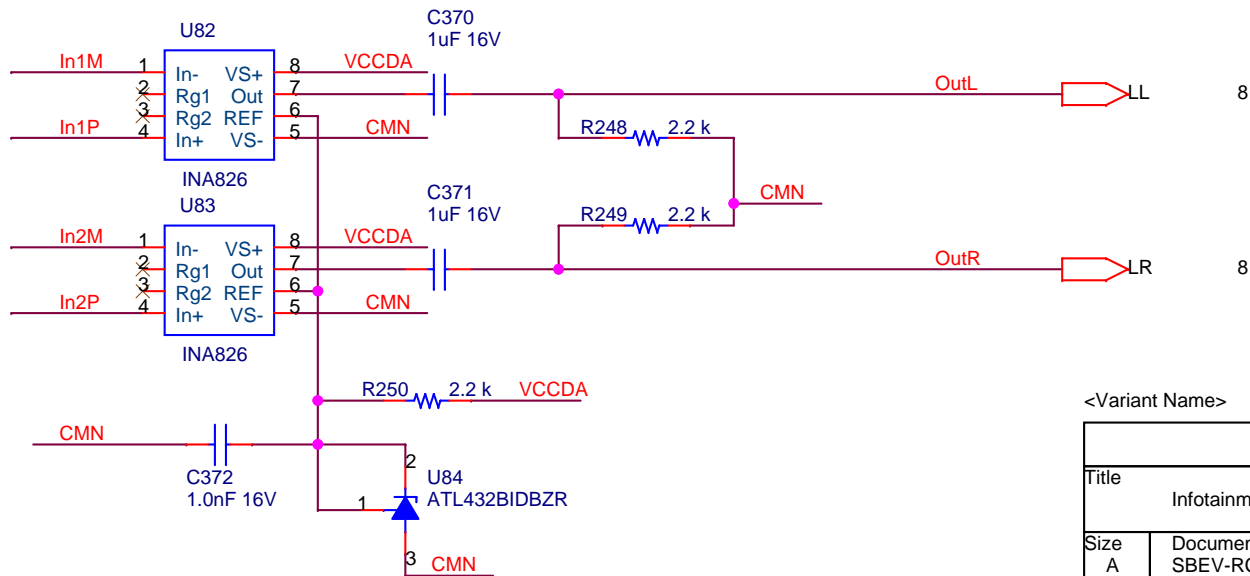
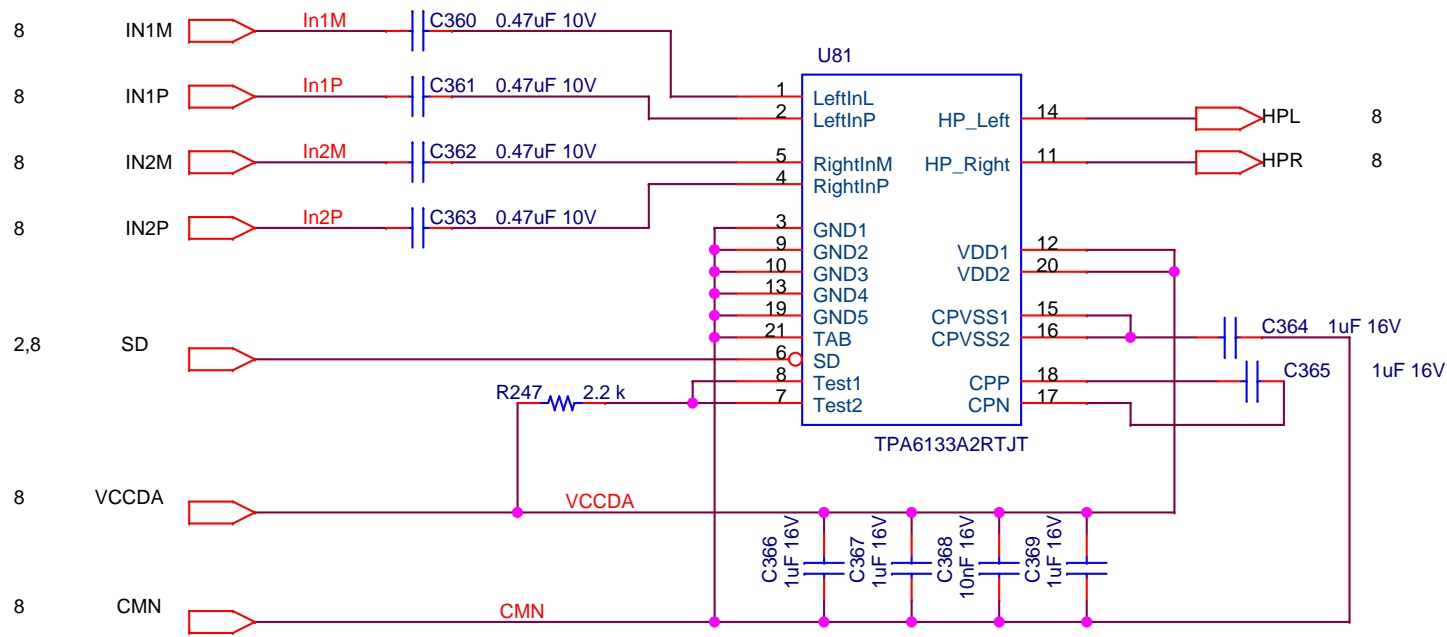
|       |                      |
|-------|----------------------|
| 1 ON  | +20 dB Left channel  |
| 1 OFF | 0 dB Left channel    |
| 2 ON  | +20 dB Right channel |
| 2 OFF | 0 dB Right channel   |



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Tuesday, January 30, 2018    | Sheet 21 of 25 |

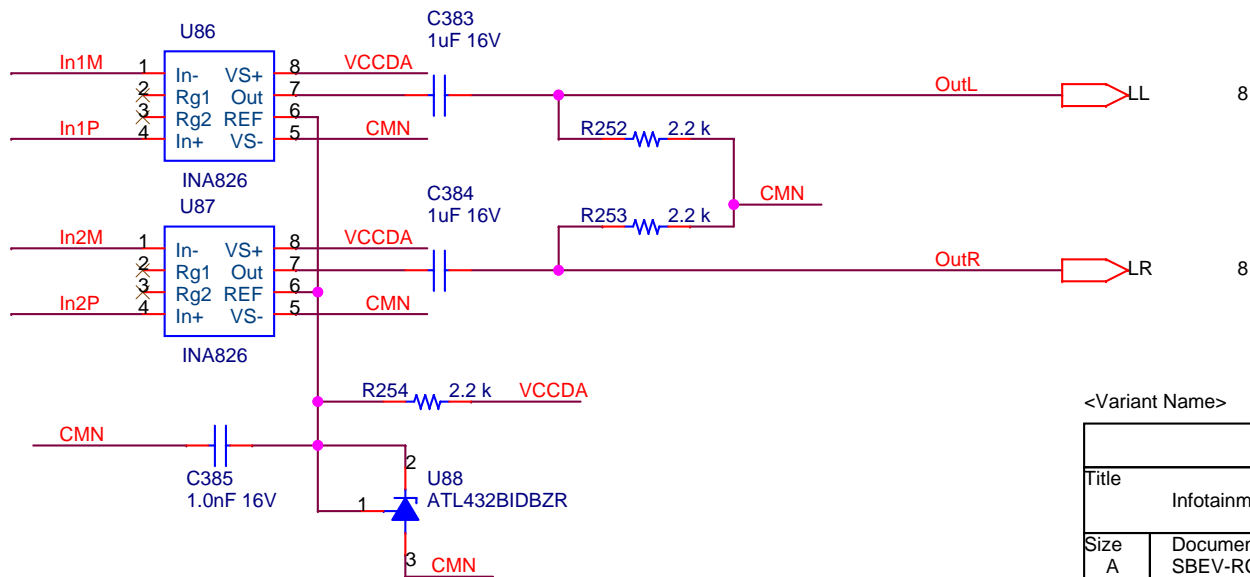
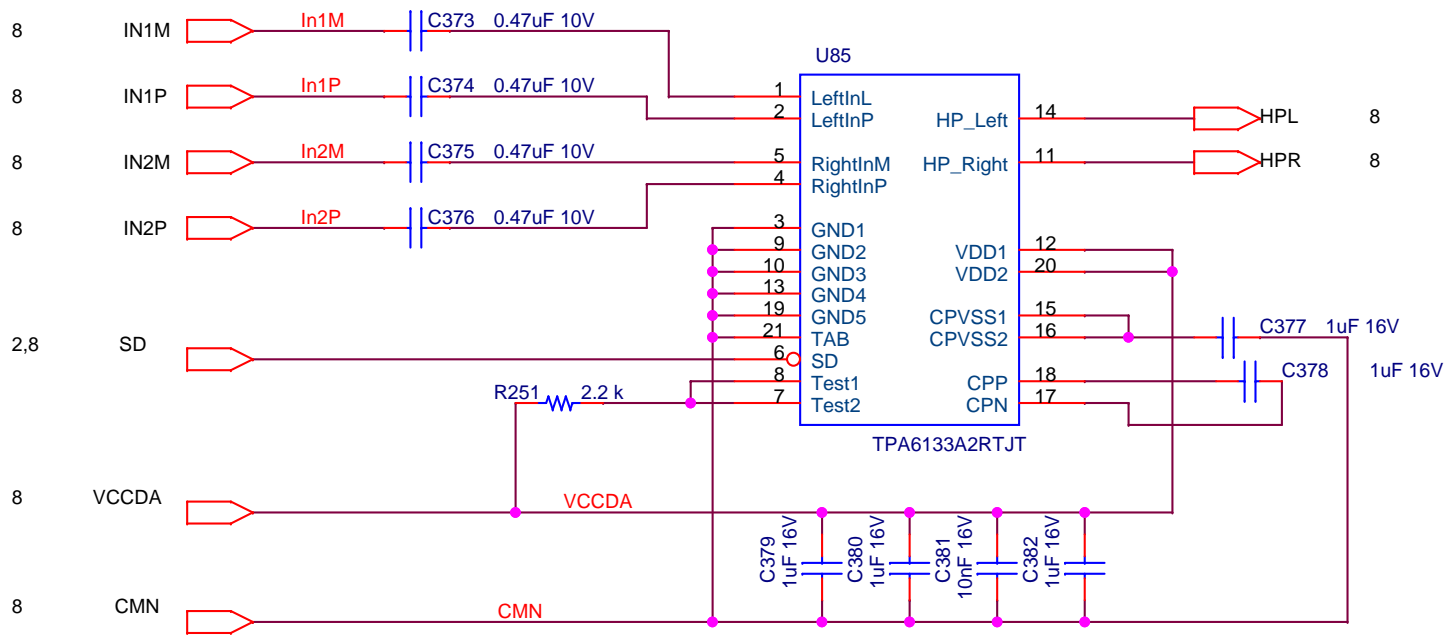
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Tuesday, January 30, 2018    | Sheet 22 of 25 |

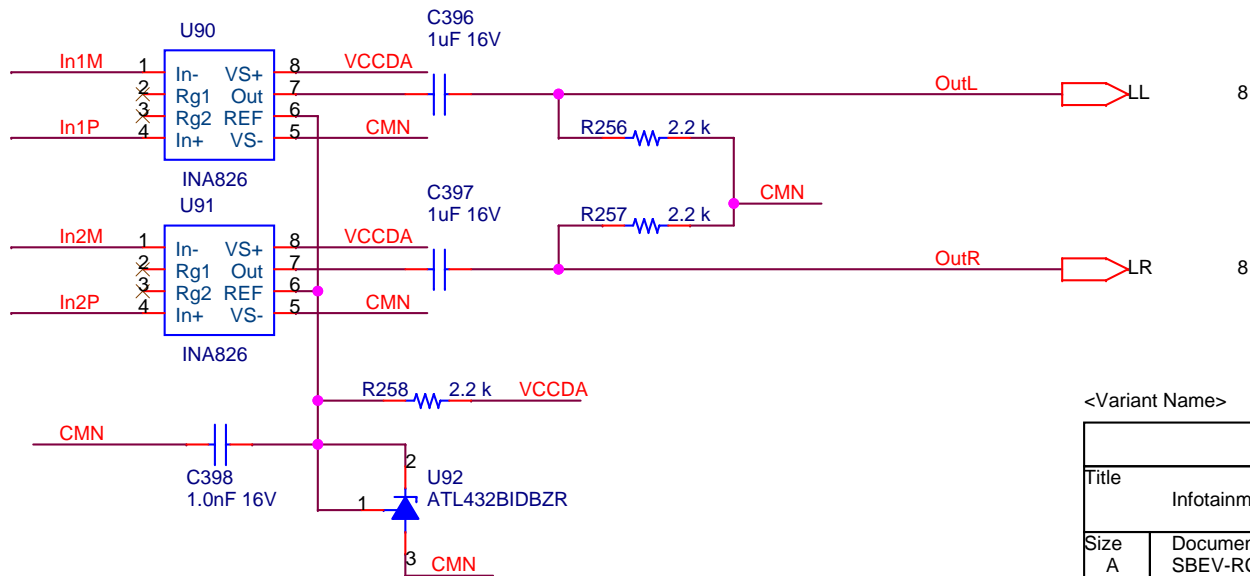
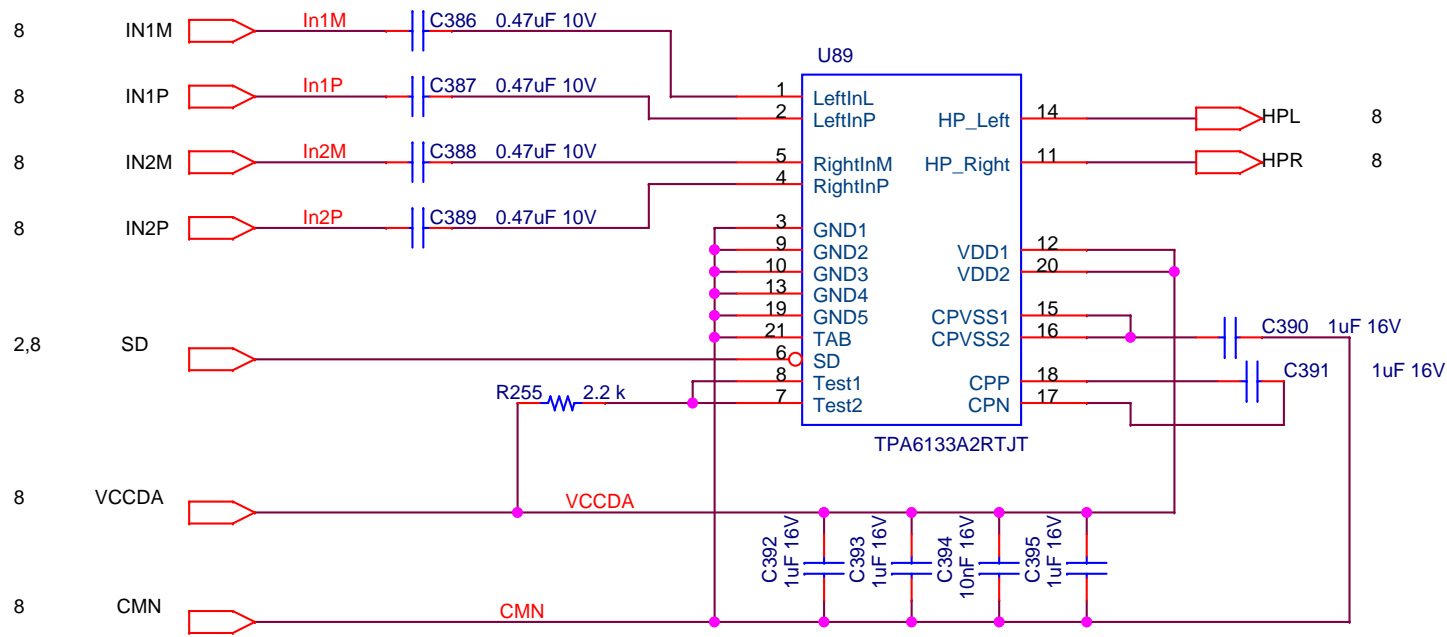
# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Tuesday, January 30, 2018    | Sheet 23 of 25 |

# Preliminary

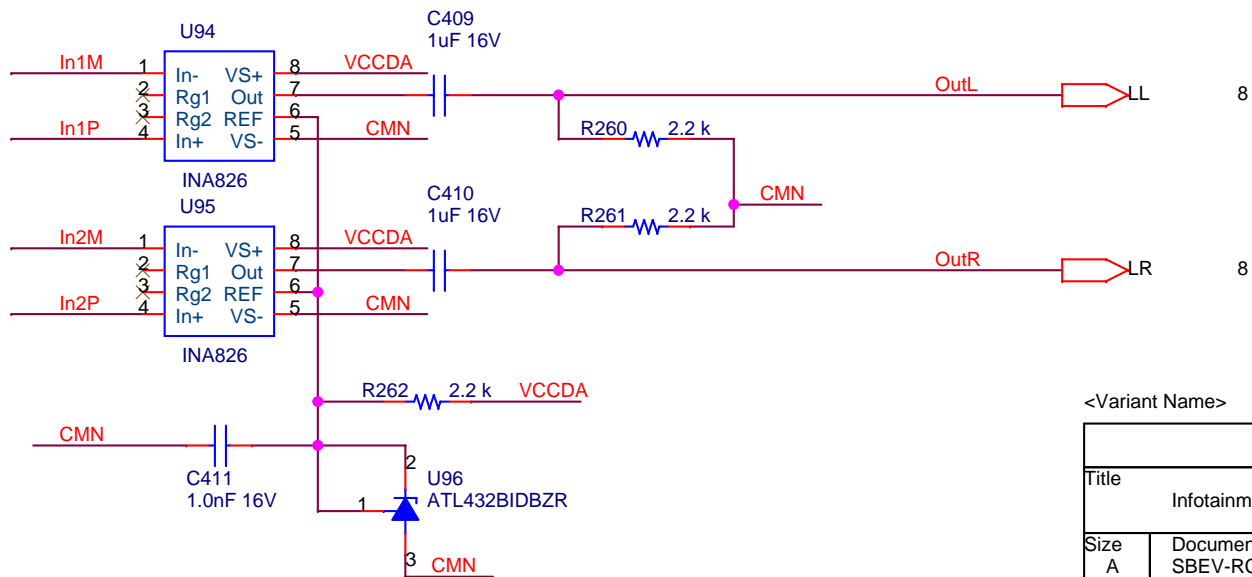
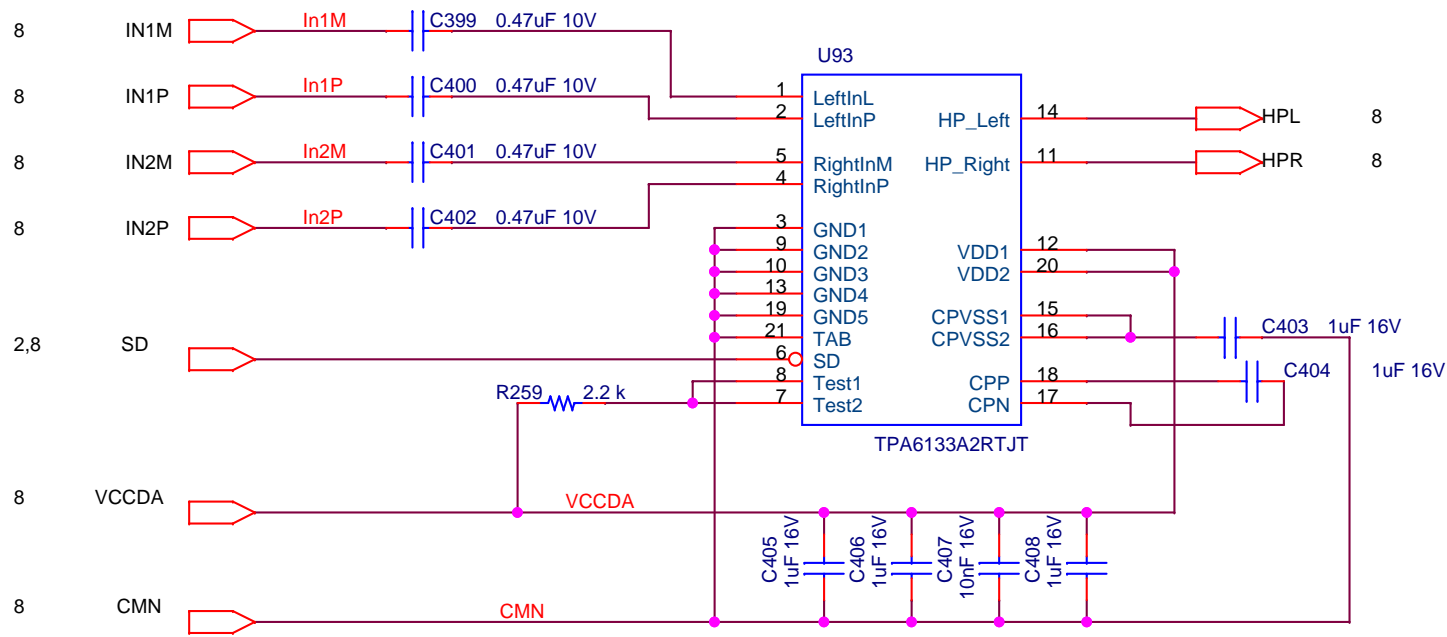


<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Tuesday, January 30, 2018    | Sheet 24 of 25 |



# Preliminary



<Variant Name>

|  |                              |                |
|--|------------------------------|----------------|
| Title  |                              |                |
| Infotainment Carrier Board Full Function (for Renesas R-Car Starter Kit) |                              |                |
| Size   | Document Number              | Rev            |
| A  | SBEV-RCAR-KF-M05(270291001C) | 3.1            |
| Date:  | Tuesday, January 30, 2018    | Sheet 25 of 25 |