



### How to use this Option Sheet:

- Fill in the form digitally. You will need to have Adobe Acrobat reader installed (free download available at <http://get.adobe.com/reader/>).
- Press the check button at the end to verify if your Option Sheet is complete.
- Once you are ready, press the Enable Read Only button to prevent accidental changes, save the changes and send the digitally filled-in Option Sheet by email to your Sales Representative.
- If you have any questions regarding this option sheet or the fill-in procedure, please do not hesitate to contact your Sales Representative for help.

### Customer Contact Information

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<b>Contact Name:</b>	
<b>Email Address:</b>	
<b>Phone Nr:</b>	
<b>Organization/ Company / Institution:</b>	
<b>Address:</b>	
<b>Address (Cont'd):</b>	
<b>Country:</b>	

### For ISIS Use – Leave Blank –

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<b>Order Confirmation:</b>	
<b>Allocated WO:</b>	
<b>Sales responsible:</b>	
<b>Project/Ref.:</b>	



## RF Configuration

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### **Receiver**

Uplink Center Frequency (400MHz – 450MHz):

### **Transmitter**

Downlink Center Frequency (137MHz – 160MHz):

## Software Configuration

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Downlink Default Bitrate

### *AX.25 Call Signs*

"From" Callsign (6 characters Max.)

"To" Callsign (6 characters Max.):

**NOTE:** Article 19 of the ITU Radio Regulations states that "All transmissions shall be capable of being identified either by identification signals or by other means". The "From" callsign is typically used for the spacecraft identification, the "To" callsign is typically used for the Ground Station identification.

Legislation may vary according to the country in which operations are performed, so check with your national radiocommunications administration to be sure.

### Buffer Settings

#### *Transmitter buffer settings*

*Default (4 frames, 235bytes/frame)*

*Alternative*

#### *Receiver buffer settings*

*Default (16 frames, 64bytes/frame)*

*Alternative*

**NOTE:** For Alternative Transmitter buffer sizes, please leave a note in the Additional Comment section detailing your request. ISIS will review your request and contact you as soon as possible.

### I2C Protocol Settings

#### *Receiver Address*

*Default (0x50)*

*Alternative*

#### *Transmitter Address*

*Default (0x51)*

*Alternative*

Alternative Receiver Address (0x##)

Alternative Transmitter Address (0x##)

#### *I2C Watchdog*

*Enabled*

*Disabled (Default)*

*Watchdog Time (35s – 65535s)*

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Applicable to TRXUV.REVB4.x

Doc. ID: ISIS.TRXUV.OS.001  
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## Transmitter Startup behavior

### Transmitter OFF

*The unit shall not transmit any signals at startup*

### Autonomously repeating beacon

*The transmitter will broadcast a predefined beacon (fixed message).*

### FM to DSB transponder

*Loopback mode, transmitter transmits the demodulated FM audio from the uplink, allowing the TRXUV to be used as a single channel transponder (only available when unit is operated on amateur frequencies).*

## Beacon settings

### Beacon type:

CW (Morse)

AX.25

### CW Rate

Default (15 words per minute)

Alternative (words per minute):

### Beacon Custom Message (Optional):

### Interval between consecutive beacon messages (1s – 65535s):

### Delay after power ON (0s – 255s):



## Electrical Configuration

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Onboard I2C pull-up resistors	Onboard I2C pull-up resistors value
<i>Fitted</i>	<i>3.3kOhm (default)</i>
<i>Not fitted (default)</i>	<i>Alternative (value in kOhm)</i>

CSKB Pin-out

### *I2C Pin-out*

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<i>I<sup>2</sup>C Clock (SCL)</i>	<i>I<sup>2</sup>C Data (SDA)</i>
H1-43 (Default).	H1-41 (Default).
H1-21 (Alternative).	H1-23 (Alternative).

### *Main power input*

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H2-45 (Default).	H2-47 (Alternative).
H2-46 (Default).	H2-48 (Alternative).

### *Other*

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H1-51 Direct output of command receiver audio  
*Not compatible with GOMSPACE EPS system*

### *GPIO*

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GPIO TX (H1-46)	GPIO RX (H1-45)
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## Mounting holes grounding

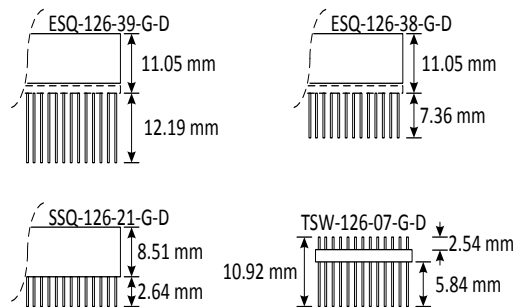
Holes Grounded (default).

Holes NOT Grounded.

**NOTE:** By default, the mounting holes are grounded by means of a 00hm resistor. For alternative grounding schemes, please leave a comment on the Additional comment section. ISIS will review your request and contact you as soon as possible

## Connector Type and Placement

### CSKB Connector



**Note:** The middle reference point is the top of the board. The TRXUV board is **1.7mm** thick.

#### Default

Samtec ESQ-126-38-G-D

Standard Stack Through.

*Other CSKB components possible on top and bottom.*

#### Alternative

(Additional cost associated, please contact your sales representative for further information).

Alternative Stack Through.

Samtec ESQ-126-39-G-D

*Other CSKB components possible on top and bottom.*

Stack Termination Bottom.

Samtec SSQ-126-21-G-D

*No other CSKB components possible below the ISIS-TRXUV.*

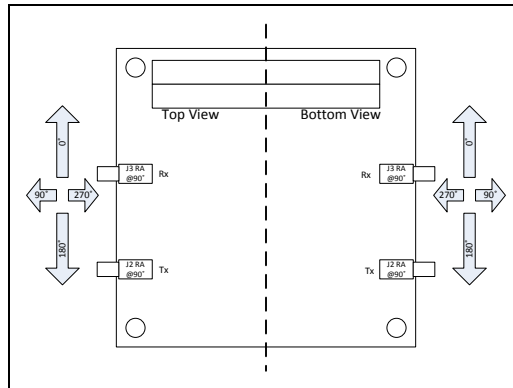
Stack Termination Top.

Samtec TSW-126-07-G-D

*No other CSKB components possible above the ISIS-TRXUV.*



## RF Connectors



VHF Transmitter Connector Mounting position and orientation (type is MMCX female)

### Default

- Top mount,
- Angled,
- 90<sup>0</sup> orientation.

### Alternative

(additional cost associated, please contact your sales representative for further information).

Top Mount

Straight

Angled, 0<sup>0</sup> orientation

Angled, 270<sup>0</sup> orientation

Bottom mount

Straight

Angled, 0<sup>0</sup> orientation

UHF Receiver Connector Mounting position and orientation (type is MMCX female)

### Default

- Top mount,
- Angled,
- 90<sup>0</sup> orientation.

### Alternative

(additional cost associated, please contact your sales representative for further information).

Top Mount

Straight

Angled, 0<sup>0</sup> orientation

Bottom mount

Straight

Angled, 0<sup>0</sup> orientation

Angled, 180<sup>0</sup> orientation

Angled, 270<sup>0</sup> orientation



## Additional Comments

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