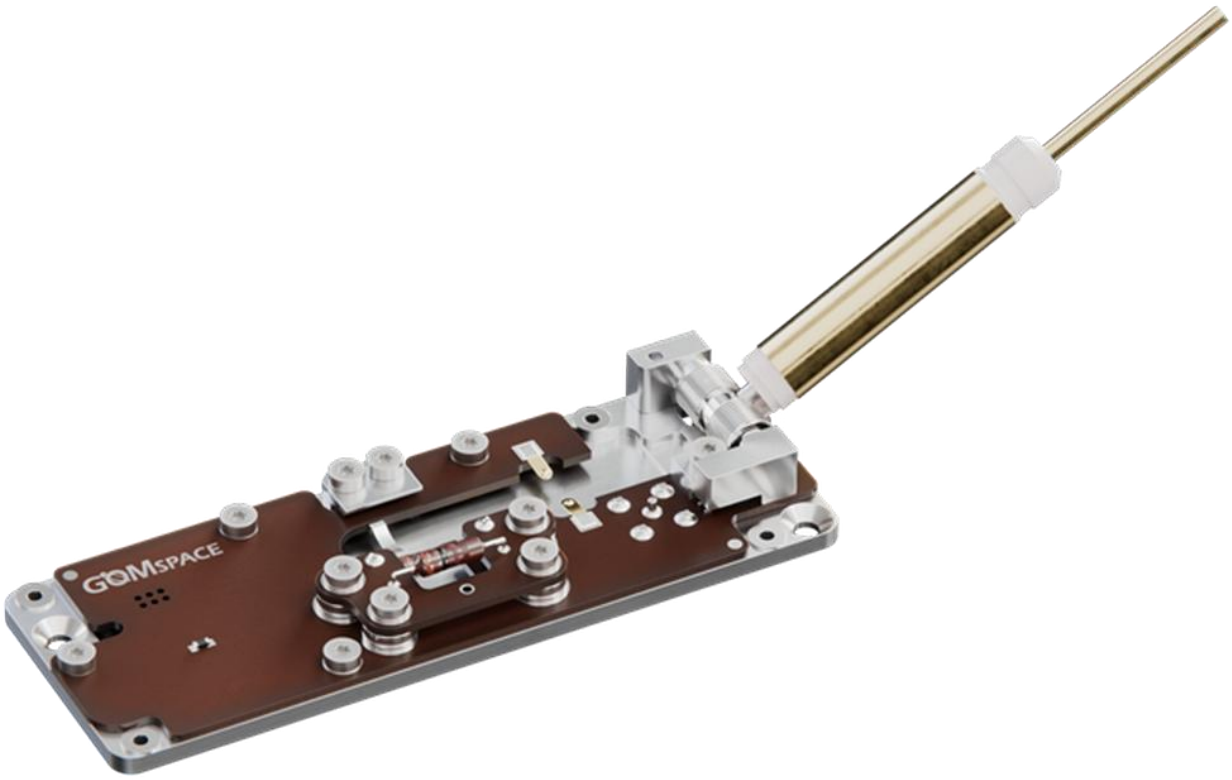

NanoCom
AM2150-O MK2 Antenna System

Manual

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Table of Contents

1 Overview

This manual describes how to stow and mount the AM2150-O MK2 on to a spacecraft. Antenna release is commanded and controlled via I²C using the **`libgssb_client`** delivered as part of a SW development kit or by using the AR6 release functionality embedded in GomSpace NanoPower P60 and P80. The SW development kit and its associated manual is included on a USB stick with each device.

2 Accessories

The following accessories are included with each AM2150-O MK2:

Item	Description
USB Memory Stick	Contains checkout-form, datasheet, manual, SW development kit and various product pictures.
Coax Cable	30cm RG-178 coax cable with MCX male RA to RA plugs.
Release Bus Cable	30cm AWG26 release bus cable with 8pin PicoBlade plugs.
Burnwire	2 meters of spare burnwire for release tests and antenna tie down before launch.
M2.0x5mm Mounting Screws	Screws for mounting AM2150-O MK2 onto structure. Type B (6U structure Y-side) requires M2.0x5mm screws, otherwise use M2.5x5mm screws.
M2.5x5mm Mounting Screws	

3 Warnings

ESD

This product uses semiconductors that can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the devices are not damaged. Use appropriate precautions.

IMPORTAINT: Take precautions not to stress the rod of the antenna. The antenna element, when stowing, should be handled by the sleeve or upper peek support. Do not apply pressure or touch the antenna rod.

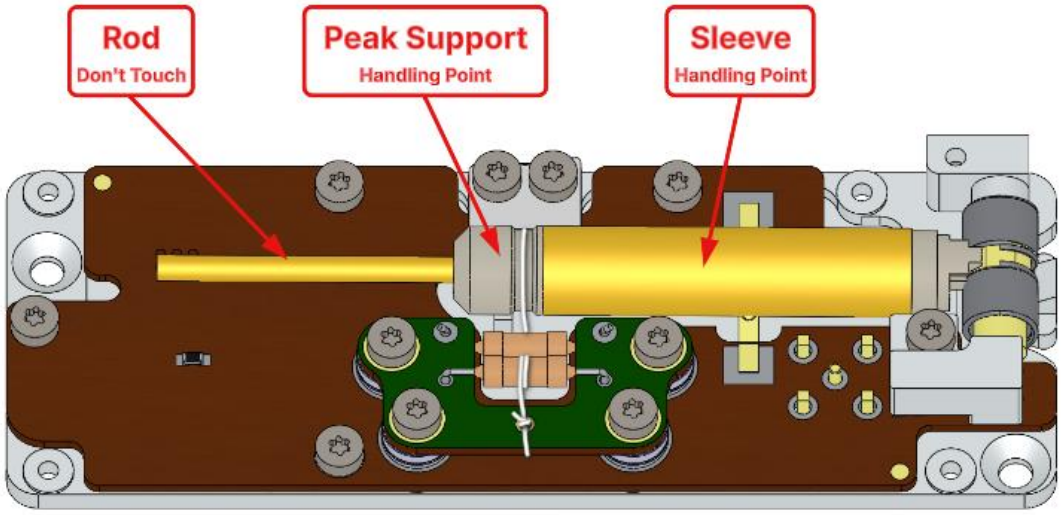


Figure 3-1 Antenna element handling points.

4 Antenna Release System

The antenna element is held down by a Dyneema Ø0.28mm monofilament wire (burnwire), which is connected to two independent burn resistors. The resistors are sequentially commanded to heat and melt the monofilament, to release the antenna. A single clamp fixates the burnwire once the antenna element is stowed and ensures easy arming of the antenna. The burnwire is located as shown in Figure 4-1.

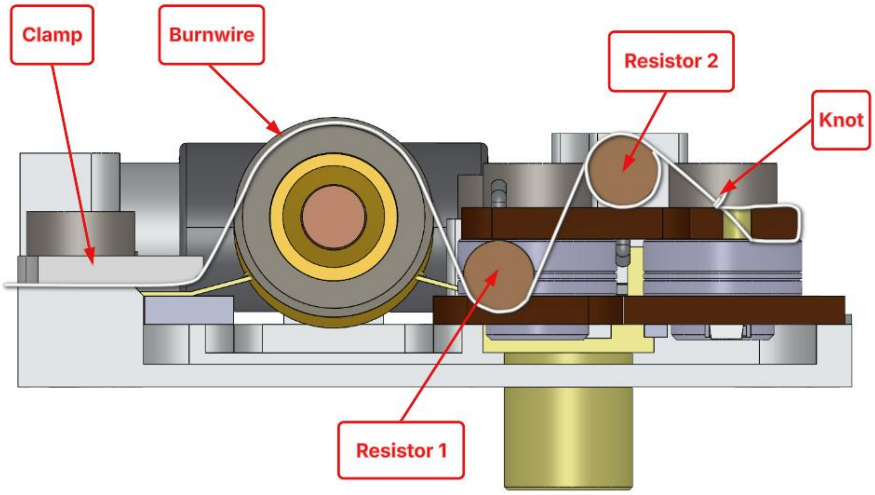
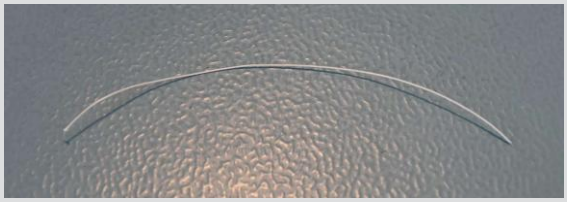
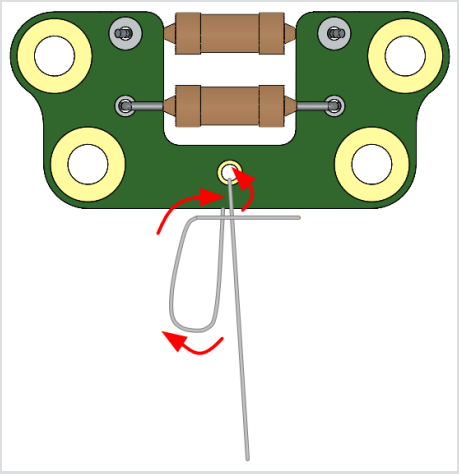
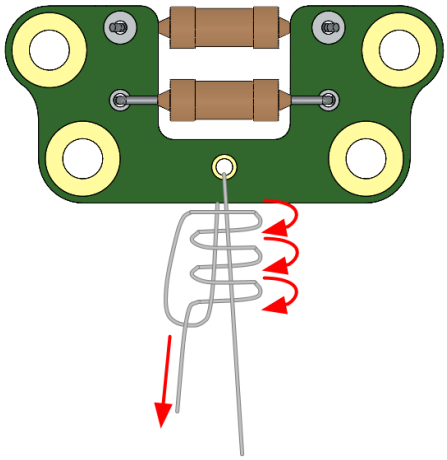
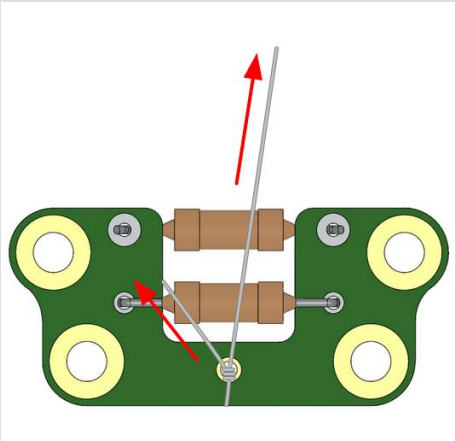


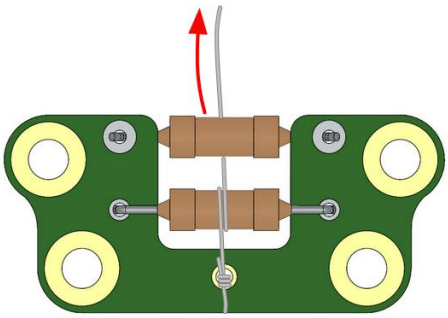
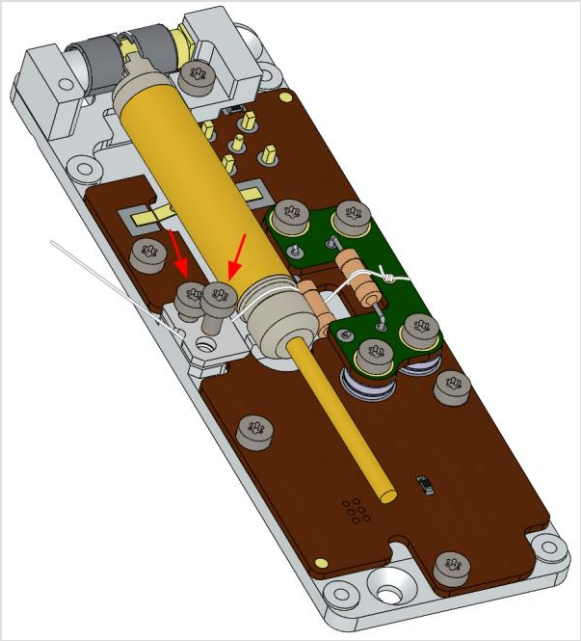
Figure 4-1 Burnwire position.

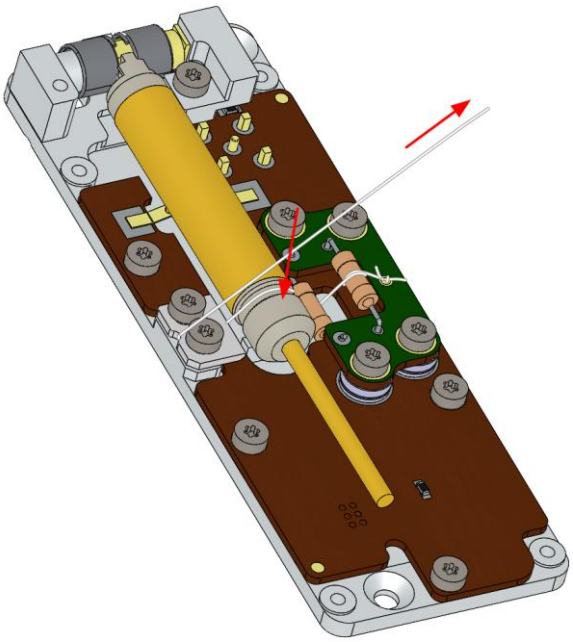
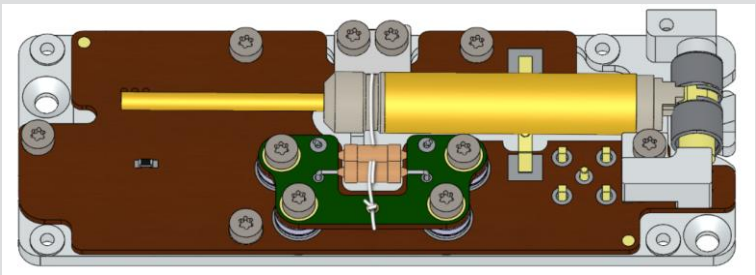
4.1 Stowing the Antenna

Below is a step-by-step procedure on how to stow the antenna.

Step	Description	Illustration
1	Cut a 20cm long piece of burnwire from the spare wire delivered with the antenna.	
2	Tie one end of the burnwire to the plated hole next to burn Resistor 2 using the Uni-Knot, procedure is listed below:	

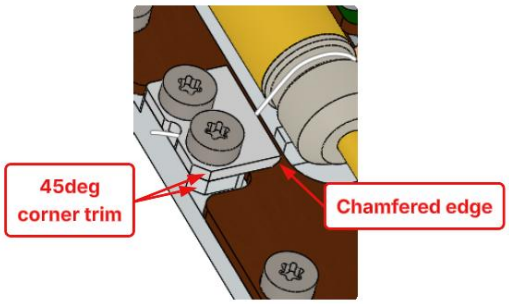
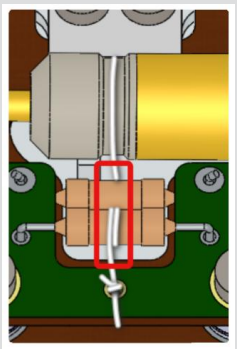
2.1	Pass one end of the burnwire through the plated hole. Form a loop alongside the wire.	
2.2	Work inside the loop, wrap the end around both lines three times	
2.3	Tighten the knot by pulling both wire ends so the loop spirals. Slide knot down to the plated hole. Once tightened around the plated hole, finalize the knot by applying firm tension to the end of the burnwire which is to be routed around resistor housings to ensure knot is immovable.	

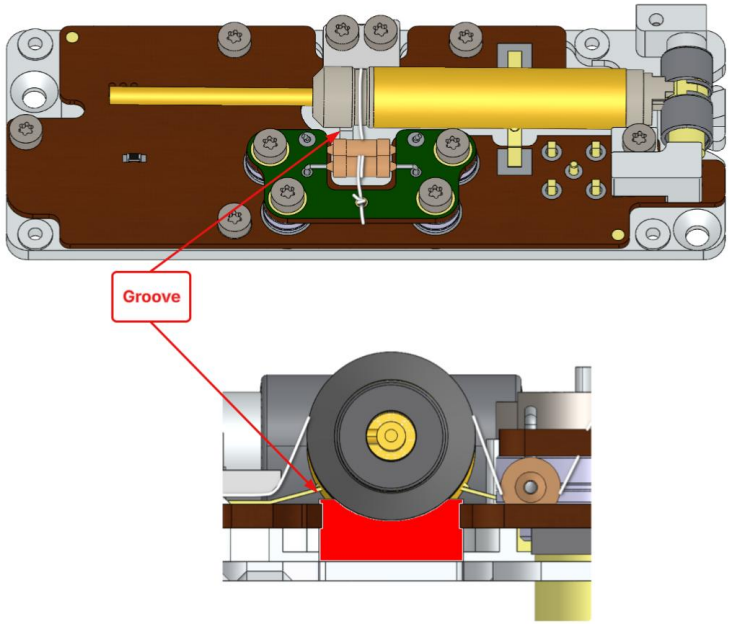
2.4	Route the burnwire around the resistor housings. It shall be routed one time around the body of resistor 2 and then below resistor 1.	
3	Loosen the two M2 screws holding the wire clamp into place. Fold down the antenna and guide the burn wire over the antenna and beneath the wire clamp. Align the burnwire across the top and bottom burn resistor. The burnwire must cross the centre of the burn resistor bodies.	

5	Use the cutout at the backside of the wire clamp as centre guide and pull wire outwards and upwards while pressing down the antenna element at peek support element. Make sure the wire is tight and correctly positioned across the burn resistors and curvature in the peek support base. While keeping the wire tighten, fixate the wire by tighten the two M2 screws for the clamp. Tightening torque is 0.34 – 0.38Nm. The clamp shall maintain tension on the wire after it is seated in its final position.	
6	Cut away the excess wire. Leave 2-3mm long wire ends from the knot and clamp.	
7	Perform Critical Device Checks	

4.2 Critical Device Checks

The table below lists device checks that are critical every time the antenna is stowed.

Item	Description
Tightening torque screws burnwire clamp	The burnwire clamp, used to fixate the burnwire, is held in place by two M2 screws. Helical inserts in the aluminium base studs secure the screws against vibration or shock loosening. Therefore, do not apply any kind of tread-locking fluid to these screws. The tightening torque is 0.34 – 0.38Nm
Burnwire clamp	Verify orientation of burnwire clamp. The 45deg trimmed corner on the base stand and burnwire clamp must be on top of each other. This ensures the burnwire clamp isn't mounted up-side-down and the chamfered edge is orientated towards the burnwire. 
Total number of burns	The recommended maximum number of activation times for each burn resistor is 15. To ensure this is fulfilled the total number of burns should not exceed 28 prior to launch. Total number of burns can be queried using the **`libgssb_client`** command **`gs_gssb_ar6_get_release_status`**. **`Burn_tries`** status should equal or be less than 28.
Antenna state	It is possible to query the release state of the antenna using the **`libgssb_client`** command **`gs_gssb_ar6_get_release_status`**. The **`status`** should equal 0 to verify the antenna is properly stowed. (0 = stowed and 1 = released).
Position of burnwire	By visual inspection it must be verified that the burnwire is touching / crossing the burn resistors at the centre of their bodies. This it to ensure the resistors will be able to melt the wire when a burn channel is activated. Example: 

Tie down of antenna element	The antenna element should be tied completely down. Meaning it must be resting and thereby fixated by the groove in the aluminium base. This is to prevent the antenna element from moving when exposed to vibration and shock. 

5 Mounting on Structure

For all mounting options except Type B use M2.5 countersunk screws. For Type B use M2.0 countersunk screws.

The recommended nominal mounting torque is:

Threads with screwlock helicoils inserts:

- M2.0: 0.51Nm (first time on)
- M2.5: 0.97Nm (first time on)

Normal threads should be secured with Loctite 262 or similar, and use mounting torque:

- M2.0: 0.34Nm
- M2.5: 0.68Nm

6 Integration with GomSpace Power Systems

AM2150-O MK2 comes in two different burn voltage options, 5V (P60 compatible) or 32V (P80 compatible). Burn voltage is chosen at the time of order through the antenna option's sheet. No other precautions are needed for power system integration.

AM2150-O MK2 is compatible with the GSSB bus interface on GomSpace P60 and P80 power systems. The AR6 client (part of **`libgssb_client`**) used to communicate with the release system on the AM2150-O is integrated in the P60 and P80 power systems by default.

AR6 commands are accessible via GSSB (directly from the power system via GOSH) or RGSSB (a remote GSSB client). A remote GSSB client may originate from another CSP node(s) local to the satellite or a ground station via a radio with CSP routing capabilities.

For customers who want to interface directly with AR6 in the antenna refer to section 7, which list the AR6 Client API delivered with the antenna as part of a Software Development Kit.

At launch, after the satellite is released from the deployer or separation ring and the power system is activated, the antenna must be deployed to establish communication with the ground.
Antenna release can be initiated in two ways:

1. Autonomously by the antenna itself via its backup deployment functionality.
2. Commanded by a AR6 client e.g. a power system.

Any combination of the two methods may be used. The following sections describe the interface wiring and recommended release procedures when AM2150-O MK2 is used with GomSpace NanoPower P60 and P80 systems.

6.1 GomSpace NanoPower P60

The 5V option of AM2150-O MK2 is compatible with the release bus interface embedded in NanoPower P60 and exposed on P6 of the Dock.

6.1.1 Release bus wiring

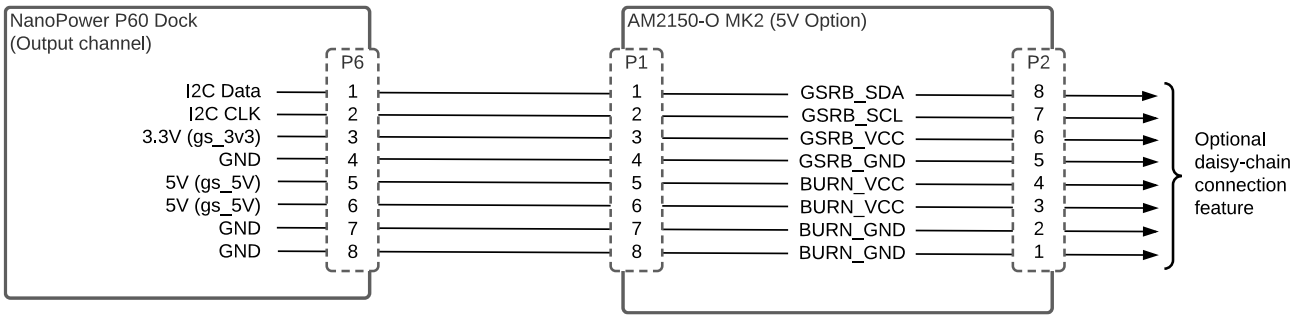


Figure 6-1 P60 release bus wiring.

6.1.2 Release functionality

P60 Dock has integrated GSSB release functionality tailored for GomSpace ANT-6F UHF and VHF. The feature is enabled via **`configuration table 1`** and status is available via **`telemetry table 4`**.
To perform an antenna release, P60 pins DE-ARM and RBF must be open circuit. Any kill switches should be open circuit (deactivated) as well, if not Killswitch_1 pin should be tied to GND to override. DE-ARM, RBF and Killswitch_1 are accessible on P60 Dock P14 or via the satellite's flight preparation panel.

Via GOSH, by setting **`depl_delay`** in P60 **`Configuration Table 1`** to a value greater than zero, P60 will autonomously switch on the P6 **`gs_3v3`** and **`gs_5V`** output channels and start the **`depl_delay`** timer at power-on reset. Once the timer elapses, if the I²C address set in **`ar6_addr`** and/or **`ant6_addr`** is nonzero, P60 will initiate its embedded antenna release algorithm, first deploying the ANT-6F UHF antenna (**`ant6_addr`**), followed by the ANT-6 VHF antenna (**`ar6_addr`**).

ANT-6 VHF uses four AR6 based release devices, one for each of its four rods. P60 will try to release each of the rods in turn, following a burn scheme where it uses hard coded burn duration values tailored for ANT-6F VHF. The integrated algo will only burn if the antenna is detected to be stowed. The maximum burn duration is 11sec. As 11sec isn't adequate to release AM2150-O MK2 under worst case low voltage and temperature conditions, the recommendation is to use the backup deployment functionality integrated into the antenna itself and omit the P60 based release by setting **`Configuration Table 1: ar6_addr`** to **`0 0 0 0`**.

To arm the backup deployment in AM2150-O MK2 default production settings must be updated to:

`Minutes until deploy: 60` (can be configured from 0 to 1092min = 18hours and 12min, values greater than 1092 will cause a variable overflow and should not be used)
`Backup deployment: Not Active` -> should be updated to -> **`Active`**
`Max burn duration: 30` (burn / max burn duration in sec, should not be changed)

AM2150-O MK2 settings can be updated using the GSSB client in P60 via GOSH. To communicate with the antenna, P60 Dock gs_3v3 output channel must be turned on. This is done via **`out_en`** parameter in **`configuration table 1`**. Once the antenna's VGSRB is powered on, I²C communication becomes available, allowing the backup deployment settings to be modified by issuing the following GOSH commands.:

`gssb ar6 addr 5` (select I²C AM2150-O MK2 address)
`gssb ar6 settings 60 1 30` (update AM2150-O MK2 settings)

For the updated settings to take effect the antenna must be power cycled. From this point on the antenna, whenever power is applied to VGSRB, will start its internal backup deployment delay timer counting down from 60min. Once the timer elapses the antenna will autonomously activate burn channel 1 for 30sec (Max burn duration), followed by a pause of 60sec (2x Max burn duration), whereafter it activates burn channel 2 for 30sec (Max burn duration). This will take place regardless of whether the antenna is released or not. Note P60 Dock 5V **gs_5v** output channel must be turned on for the actual burn to take place.

The current state of the antenna can be queried via GSSB (or RGSSB) by issuing the command:

gssb ar6 status

The status command will return detailed telemetry from the antenna:

Antenna release
- **Burn state: Idle** (Idle or Burning)
- **Burn time left: 0** (number of seconds until burning stops)
- **Antenna state: Not Released** (antenna release detection status)
- **Burn attempts: 0** (number of burn attempts)

Backup
- **State: Waiting to deploy** (Backup deployment status, can be *Not active*, *Waiting to deploy, Deploying, Finished successful* or *Finished unsuccessful*)
- **Seconds to backup deploy: 3594** (backup deployment delay timer value)

Board
- **Seconds since boot: 6** (Number of seconds since power on)
- **Number of reboots: 2** (Total number of reboots)

6.1.3 Antenna release

Prerequisites:

- AM2150-O MK2 must be connected to the GSSB interface on P60 Dock connector P6.
- AM2150-O MK2 default settings must be updated to enable backup deployment, at the desired number of minutes after power-on (max delay is 1092min).
- P60 Dock must be configured to enable output channel **gs_3v3** and **gs_5v** at power-on. This can be done by enabling the individual channels or setting **depl_delay** to a value greater than 0. Updated default settings must be stored on P60 Dock as new config and default factory settings. The battery voltage must be at SAFE level or above for GSSB output channels **gs_3v3** and **gs_5v** to be enabled. Refer to P60 manual and **configuration table 1** for further information.
- P60 Dock or flight preparation panel DE-ARM and RBF must be open circuit, and Killswitch_1 pin should be tied to GND for deployment to take place. Keep DE-ARM tied to ground during AIV work to prevent unintentional burns. DE-ARM overrides the Dock control and disables the 5V output regardless of the output channel state of **gs_5v.**

Following satellite launcher separation:

- Once the satellite is separated from the launcher, P60 is enabled when kill switches are released and GSSB supplies are turned on when battery level is at SAFE level or higher.
- AM2150-O MK2 will automatically perform antenna deployment once its **Minutes until deploy** timer elapse.
- Once AM2150-O MK2 is released, the associated TMTC radio should be enabled and ground station communication established.
- Once successful antenna deployment is confirmed, by antenna telemetry via RGSSB or by the fact that ground station communication is successful, P60 config should be updated to have channels **gs_3v3** and **gs_5v** disabled.

In case of unsuccessful antenna release:

- Failure to release the antenna may prevent ground station communication.
- In this case the P60 has integrated ground watchdog timer functionality which can be utilized.
- Once the **gnd_wdt** is triggered, usually after 48hours (user configuration dependant), P60 will restore to the default configuration and then do a reset of the P60 Dock and all mounted daughter boards.
- The reset will reschedule the deployment sequence by power cycling the GSSB supply.
- Antenna release attempts continue at 48hour intervals until the P60 **gnd_wdt** is kicked.

6.2 GomSpace NanoPower P80

The 32V option of AM2150-O MK2 is compatible with the release bus interface embedded in NanoPower P80 and exposed on J3 and J4 of the PMU.

6.2.1 Release bus wiring

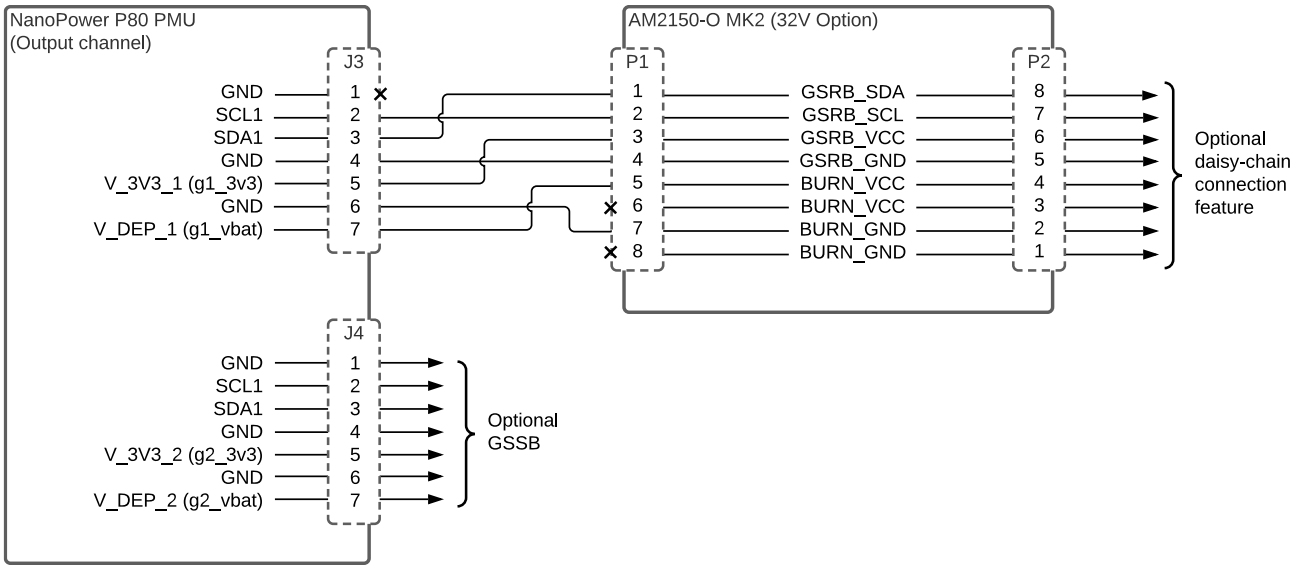


Figure 6-2 P80 release bus wiring.

6.2.2 Release functionality

P80 has integrated GSSB release functionality tailored for AR6. The AR6 release software is deployed on a wide range of GomSpace devices, including the AM2150-O MK2.

The feature is enabled via P80 PMU **configuration table 1** and status is available via **telemetry table 4**. To perform an antenna release, P80 PMU pins Deploy Inhibit and RBF must be open circuit. Any kill switches should be open circuit (deactivated) as well, if not Killswitch override pin should be tied to GND. Deploy Inhibit, RBF and Killswitch override are accessible on P80 PMU J11 or via the satellite's flight preparation panel.

AR6 release is configured via the following parameters in **configuration table 1**:

depl_en (enable / disable deployment)
depl_delay (delay in seconds from PMU power-on until deployment starts)
ar6_addr (table with GSSB address of each AR6 device)
ar6_burns (table with number of repetitive burns to perform on each AR6 device)
ar6_burn_time (table with burn time in sec for each AR6 device)

ar6_delay (table with individual AR6 device delay before release sequence starts)

Assuming that one single AM2150-O MK2 / AR6 device is connected to the release bus the recommended settings are:

P80 PMU configuration table 1 setting	Description
depl_en true	Deployment enabled.
depl_delay 3600	Deployment starts 3600sec = 60min after PMU power-on.
ar6_addr 5 0 0 0 0 0 0 0 0 0 0	First AR6 device to deploy is I²C ADR5, other entries are set to 0 = disabled.
ar6_burns 2 0 0 0 0 0 0 0 0 0 0	Number of repetitive burns to perform on each AR6 device. Set to two to ensure both burn channels on AM2150-O are activated in turn.
ar6_burn_time 30 0 0 0 0 0 0 0 0 0 0	AR6 burn duration in seconds, set to 30 which is maximum duration as per AM2150-O default settings.
ar6_delay 1 0 0 0 0 0 0 0 0 0 0	First AR6 delay is set to 1sec. The purpose of this table is to be able to separate deploy of multiple AR6 devices to avoid concurrent deployment.

The battery voltage / burn voltage should be at least 24V or more to ensure antenna release under worst case low voltage and low temperature conditions. The P80 PMU will only do AR6 release when the battery state is SAFE or above. To ensure a minimum burn voltage of 24V, CRITICAL threshold should ideal be set to 24000mV. However, it is only under worst case conditions the burn voltage should be at least 24V. In case a release attempt is unsuccessful, it will be reinitiated once the ground watchdog is triggered which causes the PMU to reset. Unless a severe malfunction occurred in the satellite, the battery voltage should at some point reach a level of 24V or more.

After power-on of the P80 PMU, **depl_delay** timer starts. The PMU will turn on output channels **g1_3v3**, **g1_vbat**, **g2_3v3** and **g2_vbat** once the timer expires.

For ar6 table entries where both **ar6_addr**, **ar6_burns** and **ar6_burn_time** are greater than 0, the PMU will sequentially command **ar6_burns** with a duration of **ar6_burn_time** after the individual **ar6_delay** timer expires.

ar6_status and **ar6_burn_try** in P80 PMU telemetry table 4 is updated for each of the configured AR6 devices as release progress:

ar6_status (0: Not released, 1: Released, 2: Not configured, -5: IO error)
ar6_burn_try (number of release attempts)

In addition, it's also possible to query the status of the antenna via GSSB (or RGSSB), when supply is enabled, by issuing the command:

```
gssb ar6 status
```

6.2.3 Antenna release

Prerequisites:

- AM2150-O MK2 must be connected to the GSSB interface on P80 PMU connector J3 or J4.
- P80 PMU **depl_en**, **depl_delay**, **ar6_addr**, **ar6_burns**, **ar6_burn_time** and **ar6_delay** must be configured for antenna release. Updated default settings must be stored on P80 PMU as new config and under protected parameter table stores. The battery voltage must be at SAFE level or higher for GSSB output channels **g1_3v3**, **g1_vbat**, **g2_3v3** and **g2_vbat** to be enabled. Refer to P80 manual and **configuration table 1** for further information.
- P80 PMU or flight preparation panel Deploy Inhibit and RBF must be open circuit and Killswitch override pin should be tied to GND. Keep Deploy Inhibit tied to ground during AIV work to prevent unintentional burns. Deploy Inhibit overrides the PMU control and disables the V_DEP_1 and V_DEP_2 outputs regardless of the output channel state of **g1_vbat** and **g2_vbat**.

Following satellite launcher separation:

- Once the satellite is separated from the launcher, P80 is enabled when kill switches are released and GSSB supplies are turned on when battery level is at SAFE level or higher.
- P80 PMU deploys AM2150-O MK2 via its integrated AR6 release functionality.
- Once AM2150-O MK2 is released, the associated TMTC radio should be enabled and ground station communication established.
- Once successful antenna deployment is verified, by PMU telemetry or by the fact that ground station communication is successful, P80 PMU config should be updated to have **depl_en** set to **false**, and GSSB supply channels turned off.

In case of unsuccessful antenna release:

- Failure to release the antenna may prevent ground station communication.
- In this case the P80 has integrated ground watchdog timer functionality which can be utilized.
- Once the **gnd_wdt** is triggered, usually after 48hours (user configuration dependant), P80 will restore to the default configuration and then do a reset of the P80 PMU and all mounted daughter boards.
- The reset will reschedule the AR6 deployment sequence.
- Antenna release attempts continue at 48hour intervals until the P80 **gnd_wdt** is kicked.

7 AR6 Client API

The AR6 Client API can be used to control the AR6 from custom mission code via I²C. The Client API can be found in **gssb_ar6.h** under **libgssb_client** delivered as part of a SW development kit included with the antenna. AM2150-O MK2 act as a I²C slave device.

All applicable commands are listed below (from AR6 API header file):

7.1 Get AR6 MCU Temperature

Get AR6 = AM2150-O MK2 MCU temperature sensor reading in degree Celsius.

API Header:

```
/**
   Get ar6 internal MCU temperature.

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[out] temp_out Temperature.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_get_internal_temp(uint8_t addr, uint16_t timeout_ms, int16_t *
temp_out);
```

7.2 AR6 Burn

Command AR6 to initiate a burn for a certain duration of seconds. Upon a reset / VGSRB power cycle AR6 will select burn channel 1. When receiving consecutive burn commands AR6 will autonomously toggle between burn channel 1 and 2 as long as the VGSRB remains powered.

Burn duration is limited by the Max burn duration setting which is part of the backup deploy settings. If a commanded burn duration exceeds the maximum burn duration setting, it will be truncated.

API Header:

```
/**
   Burn ar6.

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[in] duration Duration in seconds to burn.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_burn(uint8_t addr, uint16_t timeout_ms, uint8_t duration);
```

7.3 Stop AR6 Burn

Stop AR6 Burn immediately. Any previously initiated burn is terminated before the planned duration elapses, even if time remains.

API Header:

```
/**
   Stop ar6 burn.

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_stop_burn(uint8_t addr, uint16_t timeout_ms);
```

7.4 Get AR6 Release Status

Get AR6 Release Status struct pointer which includes the following members:

Member	Size	Description
state	uint8_t	Burning if 1; else Idle
burn_time_left	uint8_t	Number of seconds until burning stops
status	uint8_t	Antenna released if 1; else not released
burn_tries	uint8_t	Total number of deploy attempts

API Header:

```
/**
   Get ar6 release status.

   @see gs_gssb_ar6_release_status_t

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[out] status Pointer to release status.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_get_release_status(uint8_t addr, uint16_t timeout_ms,
gs_gssb_ar6_release_status_t * status);
```

7.5 Get AR6 Backup Status

Get AR6 Backup Status struct pointer which includes the following members:

Member	Size	Description
state	uint8_t	0 = Finished successful 1 = Waiting to deploy 2 = Deploying 3 = Finished unsuccessful 4 = Not Active
seconds_to_deploy	uint32_t	Seconds until backup deployment activates

API Header:

```
/**
   Get ar6 backup status.

   @see gs_gssb_backup_status_t

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[out] backup_status Backup status.
   @return gs_error_t
*/
gs_error_t gs_gssb_ar6_get_backup_status(uint8_t addr, uint16_t timeout_ms,
gs_gssb_backup_status_t * backup_status);
```

7.6 Get AR6 Board Status

Get AR6 Board Status struct pointer which includes the following members:

Member	Size	Description
reboot_count	uint8_t	Number of MCU reboots
seconds_since_boot	uint32_t	Seconds since boot / power-on of MCU.

API Header:

```
/**
   Get ar6 board status.

   @see gs_gssb_board_status_t

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[out] board_status Board status.
   @return gs_error_t
*/
gs_error_t gs_gssb_ar6_get_board_status(uint8_t addr, uint16_t timeout_ms,
gs_gssb_board_status_t * board_status);
```

7.7 Get AR6 Backup Settings

Get AR6 Backup Settings struct pointer which includes the following members:

Member	Size	Description
minutes	uint16_t	Minutes until backup deploy from MCU boot / power-on. Maximum value is 1092.
backup_active	uint8_t	0 = Backup deployment disabled 1 = Backup deployment enabled
max_burn_duration	uint8_t	Max burn duration in seconds. This values sets backup deployment burn duration and limits max commanded burn duration API command: *7.2 AR6 Burn*

API Header:

```
/**
   Get ar6 backup settings.

   @see gs_gssb_backup_settings_t

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[out] settings Backup settings.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_get_backup_settings(uint8_t addr, uint16_t timeout_ms,
gs_gssb_backup_settings_t * settings);
```

7.8 Set AR6 Backup Settings

Set AR6 Backup Settings refer to struct members under *7.7 Get AR6 Backup Settings.* VGSRB must be power cycled for updated settings to take effect.

API Header:

```
/**
   Set ar6 backup settings.

   @see gs_gssb_backup_settings_t

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @param[in] settings Backup settings.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_set_backup_settings(uint8_t addr, uint16_t timeout_ms,
gs_gssb_backup_settings_t settings);
```

7.9 Reset AR6 Counters

Resets AR6 Release Status **`burn_tries`** and AR6 Board Status **`reboot_count`**.

API Header:

```
/**
   Reset ar6 counters.

   Resets burn counters and reboot counter on ar6.

   @param[in] addr I2C address.
   @param[in] timeout_ms Timeout in milliseconds.
   @return_gs_error_t
*/
gs_error_t gs_gssb_ar6_reset_count(uint8_t addr, uint16_t timeout_ms);
```