



**American Standard Circuits**  
**Sunstone Circuits**

Attention: If your company qualifies for tax exemption, please provide us with a copy of your tax-exempt certificate [HERE](#) to ensure accurate processing. Thank you for helping us serve you efficiently!

Thank you for choosing Sunstone Circuits!

#### Technical Contact

**Order Number:** W-10160046

**Order Date:** 1/16/2025

**Quote Number:** SQW-144334

**Part Number:** GRAMS-TPC-SiPM-Telem\_BRD

**Revision Name:** -

**Product Type:** PCBEXPRESS

**Quoted By:** Customer

**Ordered By:** Customer

**Estimated Ship Date:** 1/31/2025

**Lead Time:** 2 Week

David Durachka  
david.durachka@nasa.gov  
3012869678  
2403817666

#### SOS Contact

David Durachka  
+1 2403817666

☒ Order Received

☒ Order Production

☒ Order Hold

☒ Order Complete

☒ Order Planning

☒ Order Cancelled

#### Comments

No comments have been entered.

#### Order Total

Quantity of Boards: 2  
Price Per Board: \$488.19  
Subtotal: \$976.38  
TurnKeyLabor: \$833.45  
TurnKeyParts: \$379.46  
ElectricalTest: \$58.71  
Subtotal: \$1,271.62  
Shipping: UPS Ground  
Shipping Cost: 0.00  
Assembly Shipping: UPS Ground  
Assembly Ship-Cost: 0.00  
Subtotal: \$0.00

#### Ship To

D  
NASA GSFC  
8800 Greenbelt Road  
2050 Kings Landing Road  
Greenbelt, MD 20771  
MD  
United States  
301-286-9678  
kurt.d.rush@nasa.gov

#### Bill To

Kurt Rush  
8800 Greenbelt Road  
Greenbelt, MD 20771  
United States  
david.durachka@nasa.gov

Boards Subtotal: \$976.38  
Services Subtotal: \$1,271.62  
Shipping Subtotal: \$0.00  
Tax: \$0.00  
Total: \$2,248.00

## Configuration

Quantity: **2**  
Layers: **6**  
Copper Weight: **1 oz.**  
Metric: **No**  
Length: **4.901 in**  
Width: **5.900 in**  
Thickness: **0.062 in**  
Trace / Space Outer: **6 - 9 mils**  
Trace / Space Inner: **Over 14 mils**  
Material: **FR4 150 Tg**  
Solder Mask Sides: **Both**  
Solder Mask Color: **Red (Semi-Gloss)**  
Silkscreen Sides: **Both**  
Silkscreen Color: **White**  
Silkscreen Clipping: **Yes**  
Finish: **Tin Lead**  
Plated Edges: **No**  
Plated Slots: **0**  
Plated Cutouts: **0**  
Non-Plated Slots / Cutouts: **0**  
Smallest Drilled Hole: **12 mils**  
Countersink Count: **0**  
Counterbore Count: **0**  
Castellated Holes: **No**  
Controlled depth Milling: **No**  
Panelization / Routing: **Individual**  
Panel approval prior to Manufacturing: **No**  
DPAS Priority: **No**  
COVID-19 Critical Project: **No**  
Components Overhang: **No**  
Certificate of Conformance: **No**  
Budgetary Quote: **No**  
Technical Contact First Name:  
Technical Contact Last Name:  
Technical Contact Phone:  
Technical Contact Email:  
Standard Construction: **Yes**  
Engineering Level: **Limited Review**  
Selective Plating: **No**  
Inspection: **IPC A 600 Class 2**  
Inspection Other:  
Cross Section: **No**  
Controlled Impedance: **None**  
Blind / Buried Vias: **No**  
Via Plug: **No**  
Sunstone Logo: **No**  
Date Code: **No**  
Lot Code: **No**  
Cage Code: **No**  
UL Certification: **No**  
Serialization: **No**  
FAI: **None**  
Export Controlled (EAR/ITAR): **No**  
Electrical Test: **Yes + \$58.71**  
File Conversion: **No**  
Assembly: **Drop Ship**  
Scheduled Shipping: **No**

## Payment Information

Credit Card  
Card Type: Visa  
Cardholder: Kurt Rush  
Card Number: \*\*\*\*\*8722  
Expiration: 12/2026  
Security Code: (not saved)  
PO Number:

## Assembly

There is no Assembly information available...

## Stencil

---

No Stencils ordered.

## Ready For Production?

---

Price your productions costs in real time, directly from your account.

You can now quote your production orders directly from **your order history**.

## Limited Review Service Description

---

1. Verify that the number of solder mask and copper layers submitted is what you ordered.
2. Your files contain a continuous outline and a Drill file.
3. Board size matches order form.
4. This level of engineering **does not include** :
  - a. **REVIEW of Print notes or READ ME files.**
  - b. Order form options that are not selected (cutouts, etc.). If it is not ordered, it will not be part of the PCB (even if they are in your files).
  - c. Elements not contained in the Gerber / Excellon files will not be added from a print (cutout, notches etc.).
  - d. Verification of included netlist (for electrical test we create netlist from your Gerber files).
  - e. All other Design adjustments not mentioned below:
5. We check the design for:
  - a. Potential missing holes or holes out of place (i.e. drill cutting traces).
  - b. Undersized inner layer clearances (possible shorting)



Don't want commercial emails from us?

[Unsubscribe](#)

Contact Sunstone Support

1-800-228-8198

[email](#) & [chat](#)

### Our mailing address

Sunstone Circuits  
13626 S. Freeman Road  
Mulino, OR 97042

CopyRight © 2025

ASC Sunstone Circuits LLC. All Rights  
Reserved.

Thank you for choosing Sunstone for your PCB  
needs!

R-820-004 Order Confirmation Record