

## Amplifier Module V3 for the PAM

- Frequency: 0.05-20GHz
- Gain: ---dB (to be measured)
- Impedance: 50Ω

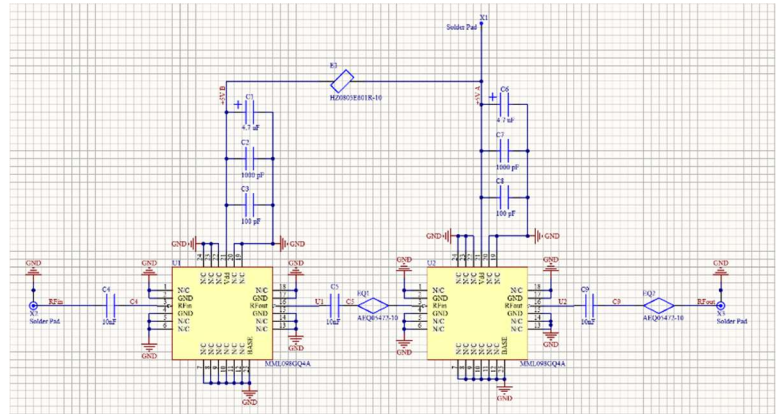
### Schematic

Inputs:

- RFin: Radio signal input
- +5V: supply voltage (+5V@57mA)
- GND

Outputs:

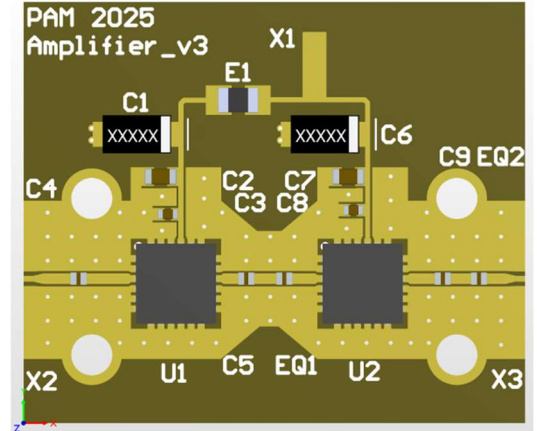
- RFout: Radio signal output



### Components - All Case Codes are metric

- |  |          |
|--|----------|
| 1 – Male SMA (AT37PET-40E0103F04)          | [X2]     |
| 1 – Female SMA (AT37PET-41E0103F04)        | [X3]     |
| 1 – Feed through cap 4-40UNC-2A (B3C153B)  | [X1]     |
| 1 – Turret Terminal 2-56 UNC – 2A (1595-2) |          |
| 1 – 23 dB amp (MML098GQ4A)                 | [U1]     |
| 2 – 10nF 0806 (939113733510)               | [C4, C5] |
| 1 – 100pF 1005 (GRM1555C2A101FA01D)        | [C3]     |
| 1 – 1000pF 1608 (GCM1885C1H102FA16D)       | [C2]     |
| 1 – 4.7uF 3216 (TH3A475K020C5000)          | [C1]     |
| 1 – 3.5dB equalizer 0605 (AEQ05472-T)      | [EQ1]    |

- 1 – RO4350 PCB
- 1 – Box
- 1 – Lid
- 4 – Screws 3-48 UNC - 2B x 3/16 (92196A091)
- 4 – Screws 2-56 UNC - 2B x 1/8 (21202)
- 4 – Screws 2-56 UNC - 2B x 5/32 (91771A884)
- 1 – RF-absorber PSA 0.08”, ca. 20 x 24 mm (MR42-0008-20)
- 1 – RF-absorber Urethane 0.06” ca. 5 x 5 mm (ARC-UD-11881-3)



## Footprint of Amplifier

Ground pins surrounding the RF input and RF output are connected to the central ground pad.

