



Salient Features

- Thick film technology
- SMT technology
- Planar Magnetics
- Magnesium alloy for weight reduction
- Hybrid Micro-Circuits

POWER CONDITIONING AND PROCESSING UNIT

Space Applications Centre (SAC) of Indian Space Research Organisation (ISRO) has developed a Power Conditioning and Processing Unit (PCPU) for use in microwave remote sensing missions. PCPU is a complex, multi output dc-dc converter that delivers peak power of around 100 W, and average power of around 10 W - using planar magnetics for the first time - which was realized using 16 and 18 layer PCBs.

Salient Features-PCPU

- Powers a pair of V & H TR Modules and a TRC unit
- 10 outputs: 8 pulsed + 2 continuous
- 59 W pulse output power
- 91.1 W average output power
- High BW pulse modulators for fast rise & fall times on pulsed outputs
- In-built EMI filter isolates the satellite bus from the pulsed load transients

Technology Transfer

SAC/ISRO offers to transfer this technology of the **Power Conditioning and Processing Unit** developed by SAC to industries in India with adequate experience and facilities. Enterprises interested in obtaining knowhow may register and submit their proposal to IN-SPACe, Ahmedabad at www.inspace.gov.in

For more details, Contact:

Technology Transfer & Industry Interface Division (TTID), PPEG
Space Applications Centre (SAC), ISRO
Ambawadi Vistar, Jodhpur Tekra, Ahmedabad - 380 015
Email: ttid@sac.isro.gov.in
https://www.sac.gov.in/SAC_Industry_Portal

