

# RISAT CTM 340 - A SCEL O70551 FM - 009 FM - 009

# 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-technology

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

### 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 write giving details of their present activities, infrastructure and facilities.

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