

DC/DC converter requirements for scientific payloads designed by BIRA- IASB

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- Scientific payloads often use the Interpoint SLH (1.5 W) or SMSA (5 W) or similar Delta VPT DC/DC converters either with single or double output, in combination with their compatible EMI filters.
- Available single voltages: 3.3, 5 , 12 or 15 V.
- Available double voltages: +/- 5, 12 or 15 V.
- If new European parts are being designed, their pin allocation and functionality should at least be compatible with the existing US parts to allow for second sourcing.
- Radiation hardness is a must for many missions.

DC/DC converter requirements for scientific payloads designed by BIRA-IASB (cont)

- Other output voltages combinations are desirable for applications based on recent FPGAs, like the ACTEL RTAX250S...2000S devices.
- Desirable output voltage combinations: +1.5 and +1.8 V, +1.5 and +3.3 V, +2.5 and +3.3 V, and possibly other.
- Probably, because of the many possible combinations, output voltages should be programmable by external resistors.
- Also very desirable: output voltages that are within specs even with low output current load, which is not the case with present devices.