W. L. Gore & Associates

SpaceWire working group meeting 6
ESTEC / Noordwijk
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Cables and Connectors

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Overview on Gore SpaceWire Products

- SpaceWire cable FM quality / # 28 conductors
  (cable O.D. 7,5 mm max.)
- SpaceWire cable for ground application / # 28 conductors
  (cable O.D 7,5 mm max.)
- SpaceWire cable addition for #26 conductors
  (O.D. 9,0 mm max.)
- Connector options

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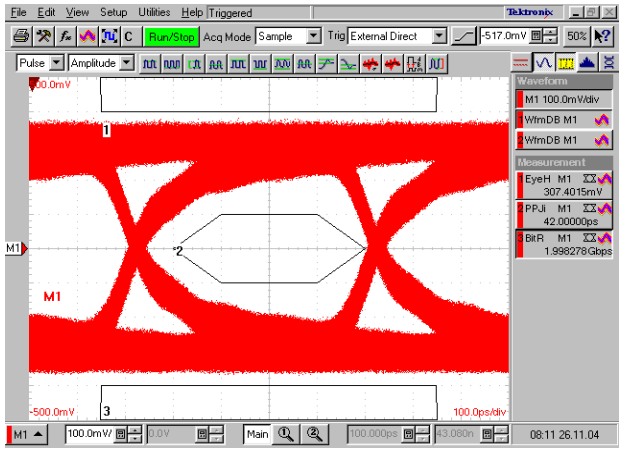
Space Wire cable FM quality

SpaceWire Cable Assemblies

Ä Four-twinax design, based on ESCC 3902/003

Ä Micro D-Sub/9-pin connector interface, space-grade



Main features:

- differential mode
- 200 Mbit/s, 10 feet typical use, up to 400 Mbit/s
- LVDS technology
- bit-error tolerant, very tight pair-pair skew
- standard ECSS-E-50-12A

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SpaceWire cable for ground applications

Ä Electrical fully compatible to FM cable quality

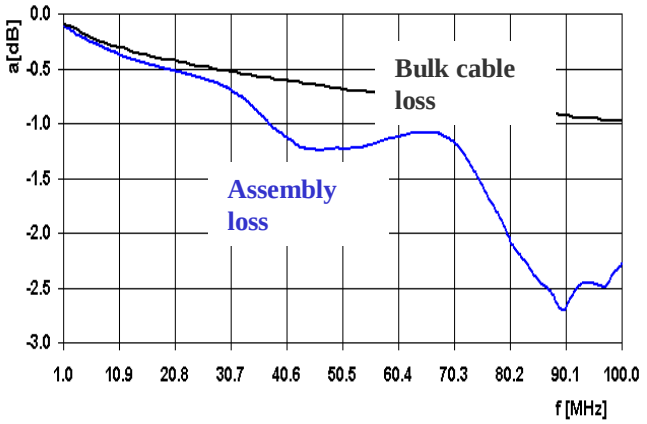
Ä Improved flexibility

Main features:

- Cost efficient
- Easy to handle and route
- Outer Cable Diameter 7,5 mm
- good EMC performance

SpaceWire cable addition

Ä Additional type variant for space-flight



Main features:

- AWG #26 conductors
- Usable for higher datarates
- Advantage for longer length (i.e. EGSE)
- Even compatible to existent Micro-D /9pin connector
- Outer Cable Diameter 9,0 mm max.

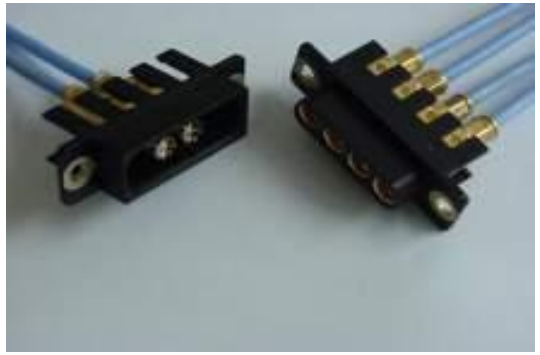
SpaceWire Connector options

2-way LVDS high speed assembly

Multi-way DSub LVDS assembly

Advanced SpaceWire assembly

SpaceWire assembly



4way high speed assembly

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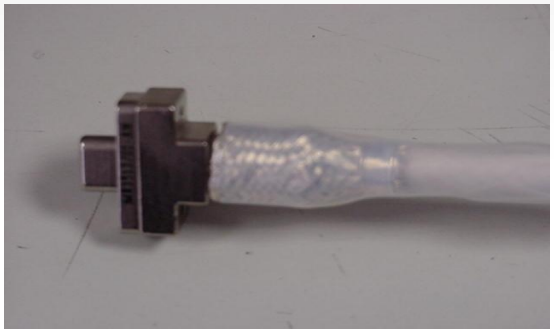
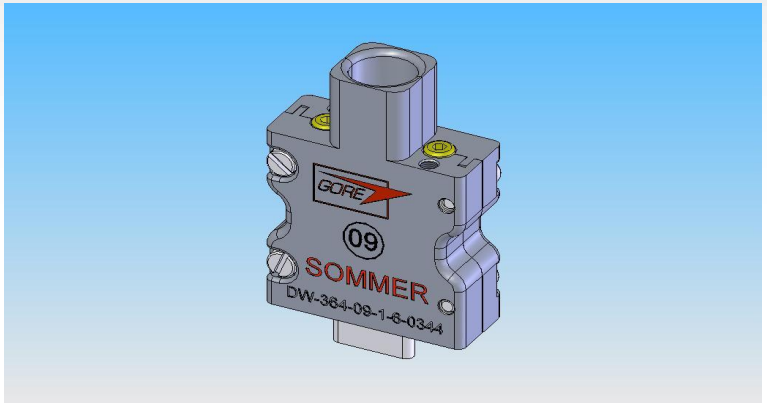
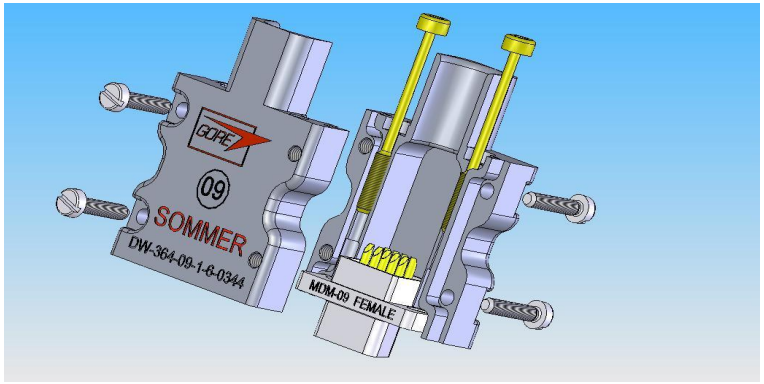
SpaceWire Backshell options



EMC standard backshell



Advanced EMC split backshell



Split backshell

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