

GOLD SELECTIVE-PLATING CONTACTS FOR NSX ARINC 600

High Performance at a Reduced Cost



Arinc 600 size 2 receptacle populated with selective plating size 22 contacts



#22 PC tail socket contacts with selective plating

To address the aerospace market challenges, strong competition and regulations, Radiall designed a new generation of contacts for Arinc 600 connectors. Fully integrated to its latest generation of Arinc 600 connectors, this option offers up to 10% cost savings while being fully qualified under the Arinc 600 standard.

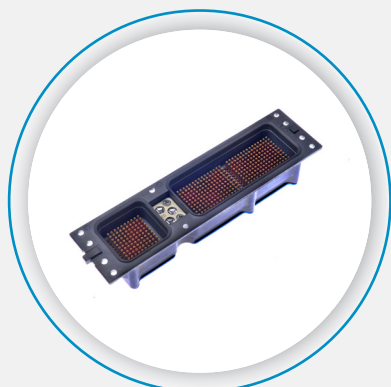
With up to 800 contacts per connector, the first step in achieving cost savings without compromising performance is to reduce the amount of gold used in non-active parts of contacts.

Based on this, Radiall engineers developed a selective-plating solution for replacing #22 standard PC tail socket contacts. With 0.12 μm of gold on non-active parts instead of 1.27 μm on standard contacts, the selective-plating solution offers up to 10% connector savings.

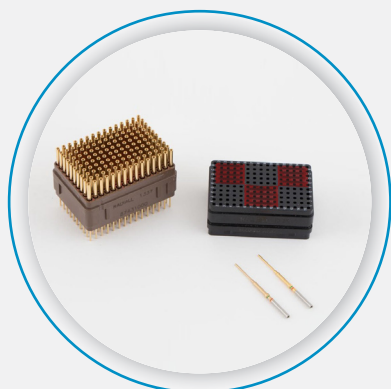
The reduced amount of gold decreases the dependence on raw materials, which ensures pricing stability and enables long-term savings. In addition, the selective-plating contact design is the same as standard contact design, so no PCB nor process changes are required. Finally, the front release/front removable technology and the proven screw-machined technology facilitate maintenance, allowing removability.

By keeping the same level of gold as standard contacts on active parts (1.27 μm), Radiall provides a perfectly-secure solution that ensures the same level of conductivity as standard contacts. Fully integrated into the latest generation of cost-efficient and greener Arinc 600 connectors, the selective plating meets Arinc 600 standards.

The existing 150 and 100 cost-effective inserts can be associated within the same connector to any other inserts equipped with selective plating #22 PC tail socket contacts, providing additional cost savings up to 20% and weight savings up to 10%.



Arinc 600 size 2 receptacle populated with selective plating size 22 contacts



150 and 100 cost-effective inserts can be used within the same connector with any other inserts equipped with selective plating contacts.

Gold selective plating provides the same level of conductivity and performance as fully-plated contacts while providing up to 10% cost reduction and improving pricing stability.

SPECIFICATIONS (GENERAL)

Fully qualified under Arinc 600 specifications, Radiall's new design provides you with the following characteristics:

- Temperature range: - 65 °C/+125 °C
- Temperature life: 1000 hours at 125 °C
- Salt spray: EIA364-26 test condition B (48 hours)
- Fluid resistance: EIA364-10 (fluids a, e, i)
- Durability: 500 mating and unmating cycles
- Random vibration: EIA364-28 test condition V letter E (16.91g, from 50 to 2000 Hz, 8 hours per direction)
- Shock: EIA364-27, 50 g 11 ms half sine, 3 impacts per direction
- Mating force:
 - Connector size 1: 27 pounds (120 N) max
 - Connector size 2: 60 pounds (267 N) max
 - Connector size 3: 105 pounds (467 N) max
- Same electrical and mechanical performance as standard contacts

FEATURES & BENEFITS

- Secure solution
- Same performance and conductivity as standard contacts
- Simplified process with no gold removal prior to soldering
- Compatible with the same PCB as standard contacts
- Up to 10% immediate cost savings
- Fully integrated into NSX Arinc 600, the widest range of the market
- Made by the Arinc 600 specialist

APPLICATIONS

- Integration of the selective plating offer in the standard catalog, with:
 - Part-numbering system
 - Price lists