ARINC Project Initiation/Modification (APIM)

1.0	**Name of Proposed Project**	**APIM 20-002**

Supplement 21 to ARINC Specification 600: Air Transport Avionics Equipment Interfaces

Size 4 ARINC 600 Connector, Rack and Panel (960 pins)

1.1   Name of Originator and/or Organization

AIRBUS

2.0   Subcommittee Assignment and Project Support

2.1   Suggested AEEC Group and Chairman

ARINC 600 Connector Working Group
Chairman TBD

2.2   Support for the Activity (as verified)

Airlines: TBD
Airframe Manufacturers: AIRBUS
Suppliers: RADIALL / SOURIAU / TE
Others: to add system suppliers → AIRBUS AVIONICS (internal suppliers)

2.3   Commitment for Drafting and Meeting Participation (as verified)

Airlines: TBD
Airframe Manufacturers: AIRBUS
Suppliers: RADIALL / SOURIAU / TE
Others: to add system suppliers → AIRBUS AVIONICS (internal suppliers)

2.4   Recommended Coordination with other groups

Cabin Systems Subcommittee
SAI Subcommittee

3.0   Project Scope (why and when standard is needed)

3.1   Description

The aim is to increase:

- New connector size with 3 additional cavities
- Shell number available
- Pins number

See attached presentation.
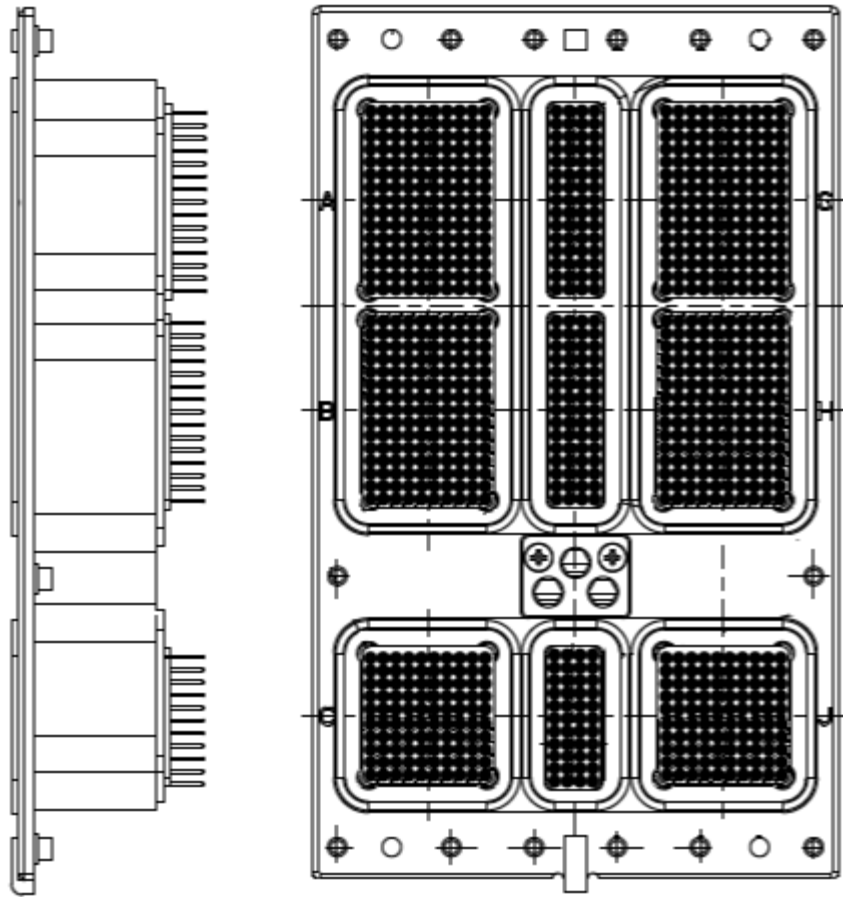
Receptacle connector
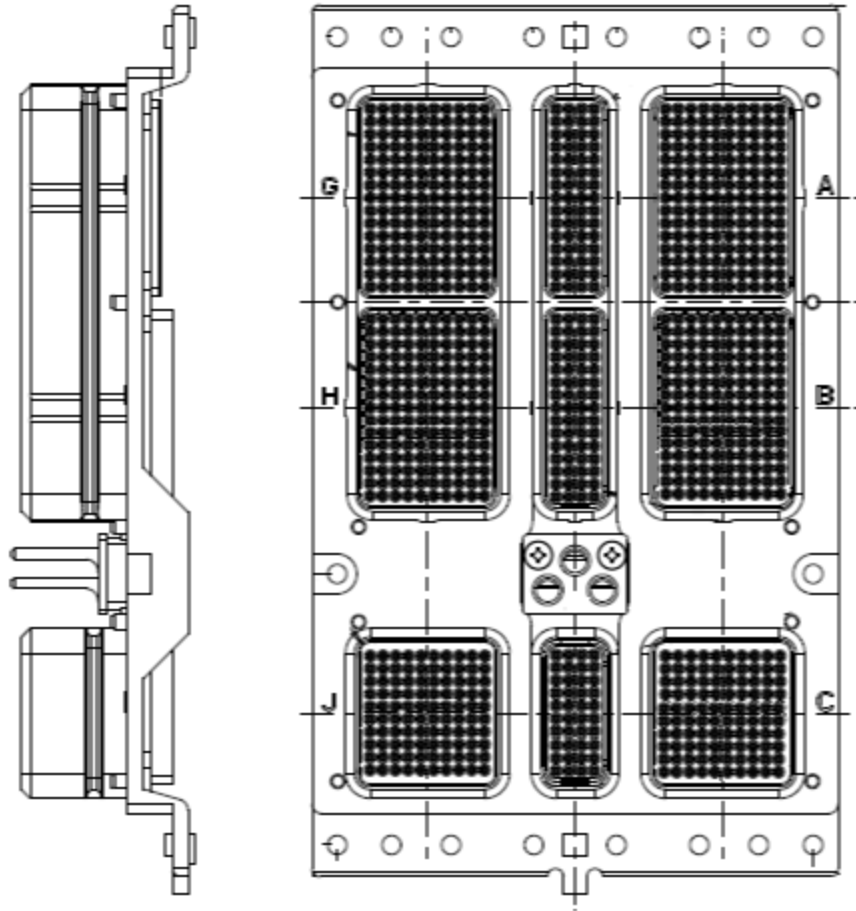
Plug connector

ARINC 600 performance expected to be defined, both electrical and mechanical.

3.2 Planned usage of the ARINC Standard

Note: New airplane programs must be confirmed by the aircraft manufacturer prior to completing this section.

New aircraft developments planned to use this specification   yes ☐ no ☒
     Airbus: (aircraft & date)
     Boeing: (aircraft & date)
     Other: (manufacturer, aircraft & date)

Modification/retrofit requirement   yes ☒ no ☐
     Specify: (A320 & 2023 for testing)

Needed for airframe manufacturer or airline project   yes ☒ no ☐
     Specify: (A320 & 2023 for testing)

Mandate/regulatory requirement   yes ☐ no ☒
    Program and date: (program & date)
Is the activity defining/changing an infrastructure standard?   yes ☒ no ☐
    Specify: ARINC 600 standard
When is the ARINC standard required?   Dec 2021
What is driving this date?
    to secure system architecture new development with buy strategy
Are 18 months (min) available for standardization work?   yes ☒ no ☐
    If NO please specify solution: _____
Are Patent(s) involved?   yes ☐ no ☒
    If YES please describe, identify patent holder: _____

3.3 Issues to be Worked

(Describe the major issues to be addressed.)
Additional cavities with existing ARINC 600 shells (cf. drawing).

3.4 Security Scope

Is Cyber Security Impacted (if yes, check box(es) below)   yes ☐ no ☒
    Aircraft Control Domain   yes ☐ no ☒
    Airline Information Services Domain   yes ☐ no ☒
    PAX Information and Entertainment Systems   yes ☐ no ☒
    Other _____   yes ☐ no ☒

4.0 Benefits

4.1 Basic Benefits

Operational enhancements   yes ☐ no ☒
For equipment standards:
(a) Is this a hardware characteristic?   yes ☒ no ☐
(b) Is this a software characteristic?   yes ☐ no ☒
(c) Interchangeable interface definition?   yes ☐ no ☒
(d) Interchangeable function definition?   yes ☐ no ☒
    If not fully interchangeable, please explain: _____
Is this a software interface and protocol standard?   yes ☐ no ☒
    Specify: _____
Product offered by more than one supplier   yes ☒ no ☐
    Identify: RADIALL / SOURIAU / TE

4.2 Specific Project Benefits

Offer more PIN contact per avionics equipment to system.

4.2.1 Benefits for Airlines

Enabler for more integrated systems (e.g. Reduce number of avionics S/N)

4.2.2   Benefits for Airframe Manufacturers

Offer more PIN contact per avionics equipment to system,

4.2.3   Benefits for Avionics Equipment Suppliers

Foster an ecosystem around a new standardized connector.

5.0   Documents to be Produced and Date of Expected Result

ARINC 600 Standard update for December 2021.

5.1   Meetings and Expected Document Completion

6 meetings to be anticipated during the 18 months

The following table identifies the number of meetings and proposed meeting days needed to produce the documents described above.

Activity	Mtgs	Mtg-Days (Total)	Expected Start Date	Expected Completion Date
ARINC 600	6	18	06/2020	12/2021

Please note the number of in-person meetings and the number of meeting days to be supported by the ARINC IA Staff.

Please add a statement describing the frequency of web conferences.

6.0   Comments

These meetings will be held online until in-person travel is viable.

6.1   Expiration Date for the APIM

December 2022

Completed forms should be submitted to Paul Prisaznuk (pjp@sae-itc.org)
AEEC Executive Secretary & Program Director