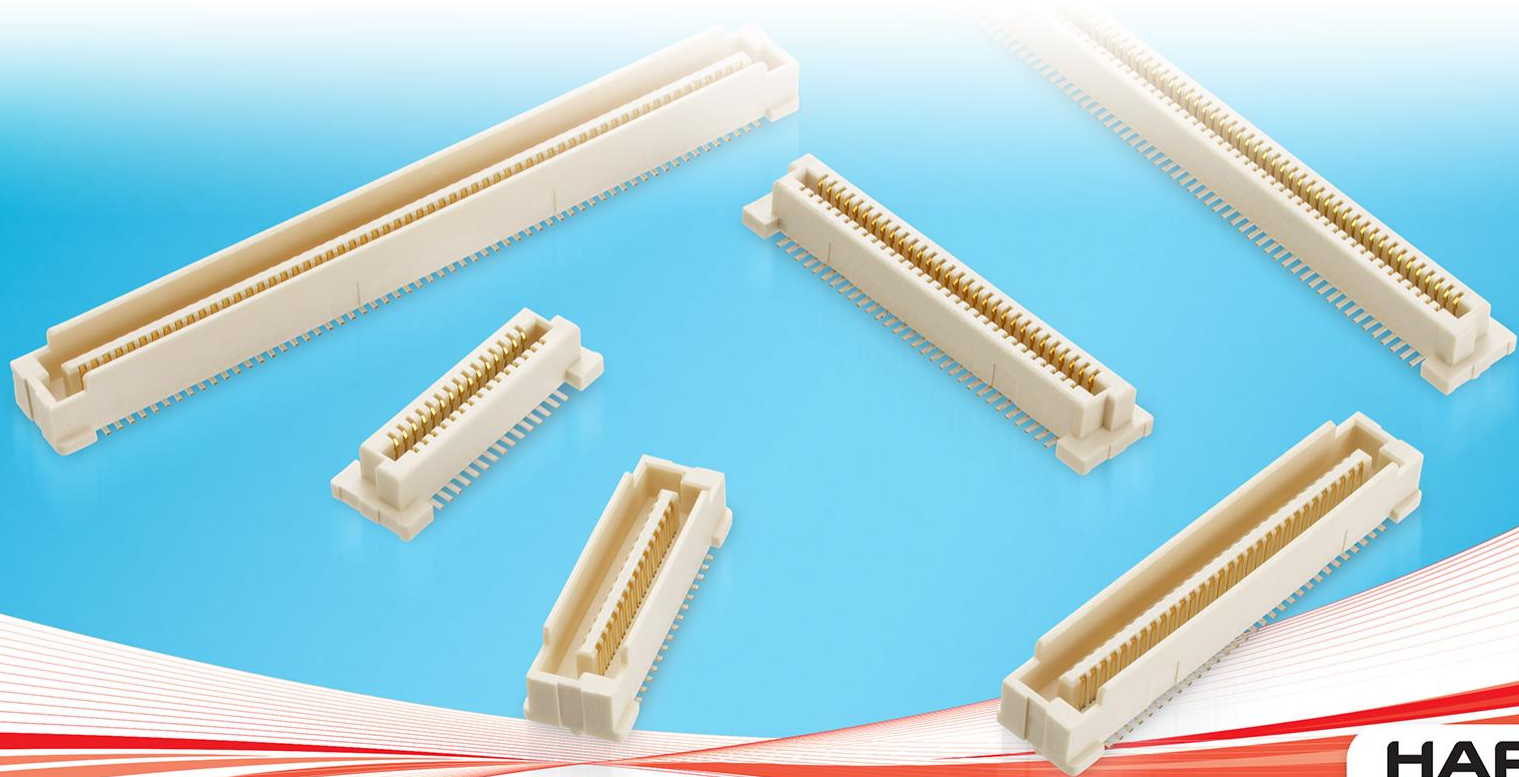


Archer .8



HARWIN

Archer .8

Smaller connections for Industry

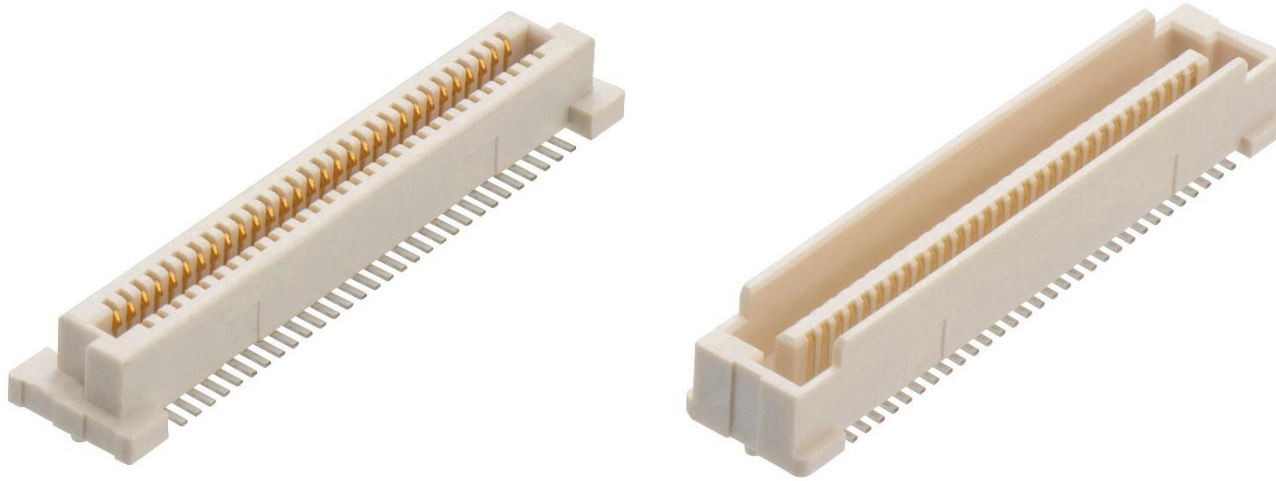


It's not just consumer electronics that are either getting smaller or packing in more functionality. Industrial and automation systems also benefit from less space, less weight and more features.

These applications require smaller packages with high performance – which Archer .8 delivers.

Archer .8

The basics

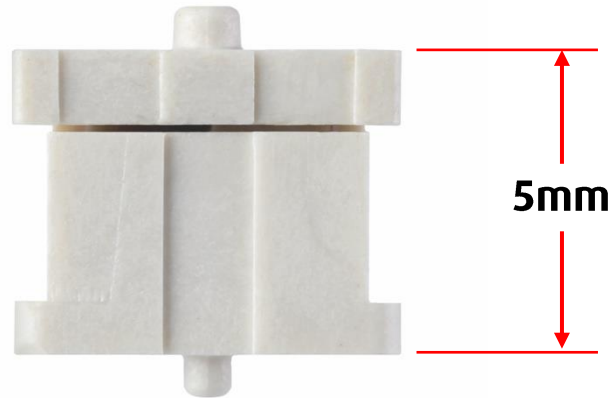


Archer .8 is a board-to-board connection system. The pitch of the contacts is 0.8mm – double row layout enclosed in high temperature UL94V-0 plastic housings.

The contact area is gold for durability and conductivity; the terminations are 100% tin for optimal surface mount soldering.

Archer .8

Compact board-to-board

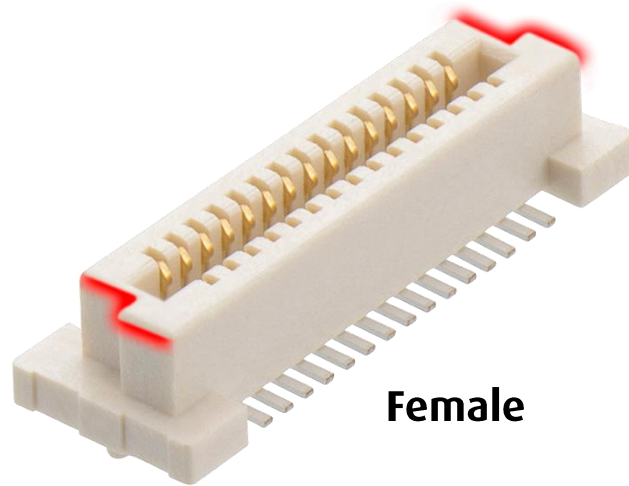


At 5mm between mating PCBs, this compact design is great for mezzanine daughterboards mated to motherboards.

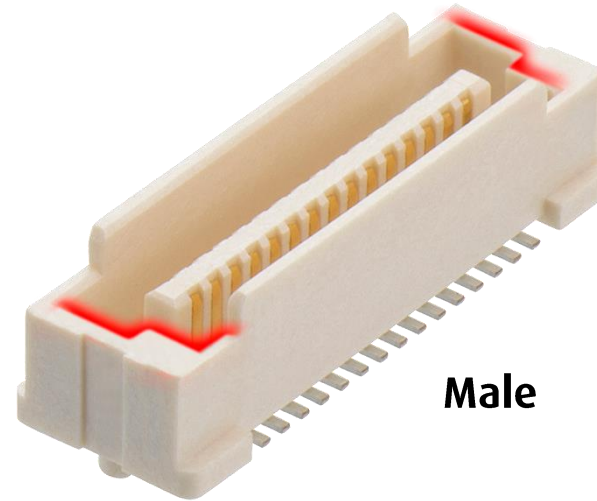
Or you can also use it as a [low-profile alternative to cabling](#), by mounting one connector half to a custom Flexible Printed Circuit.

Archer .8

Eliminate mis-mating



Female



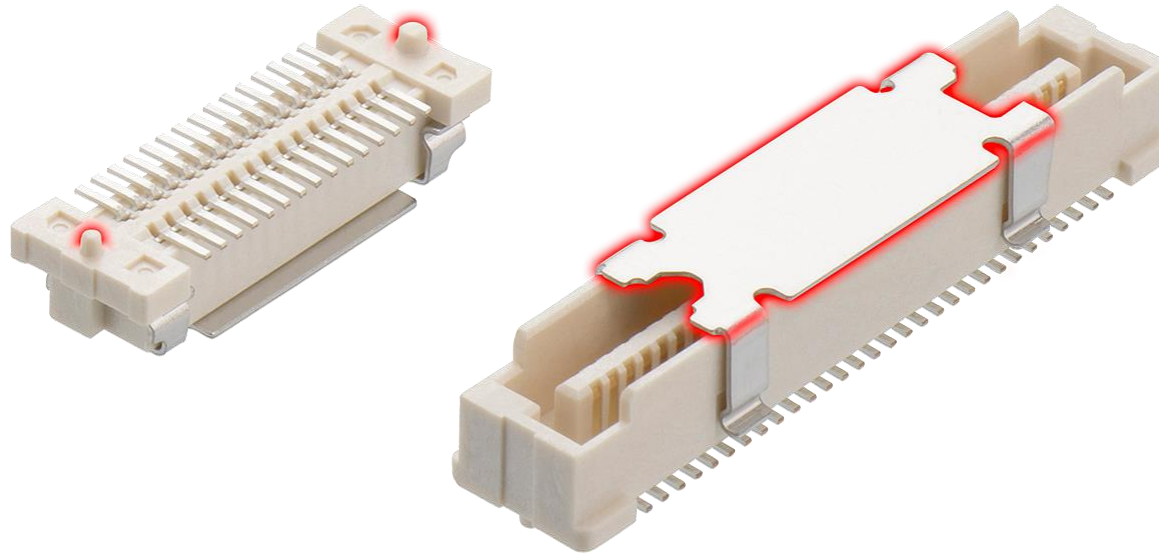
Male

The precision plastic housings have built-in polarizing features, to ensure correct mating every time.

The contacts are recessed and shrouded on both male and female connector styles, to prevent accidental damage from partial mis-mating or external knocks.

Archer .8

Ready for automated production

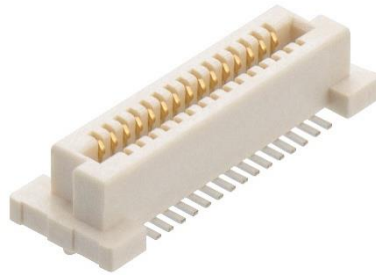


All Archer .8 connectors are supplied in Tape and Reel packaging. Every connector is fitted with a removable pick and place cap for automated vacuum pick-up and SMT assembly.

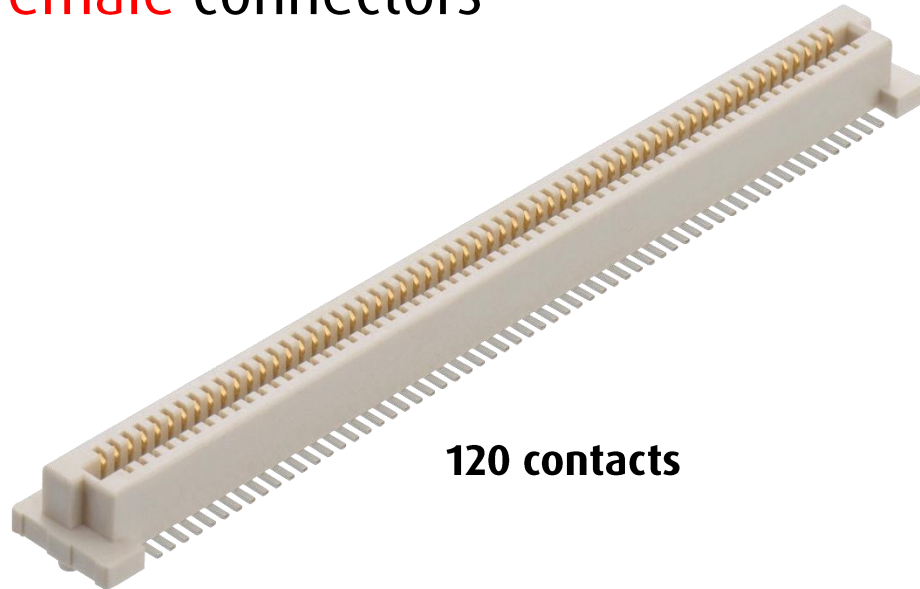
To minimize movement on the PCB and during the reflow process, each housing has built-in location pegs. The pegs on each end are different diameters, to ensure that connectors are assembled in the right orientation on the PCB for both hand and robotic assembly.

Archer .8

Female connectors



30 contacts



120 contacts

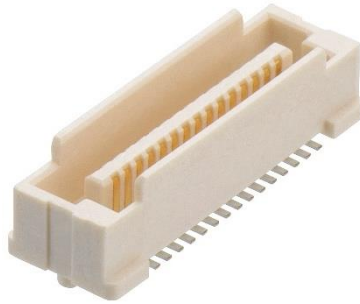
High contact counts are standard for this range. The female connectors come in the following contact counts:

- [M58-2800342R](#) = 30 (15 + 15)
- [M58-2800642R](#) = 60 (30 + 30)
- [M58-2801042R](#) = 100 (50 + 50)
- [M58-2800442R](#) = 40 (20 + 20)
- [M58-2800842R](#) = 80 (40 + 40)
- [M58-2801242R](#) = 120 (60 + 60)

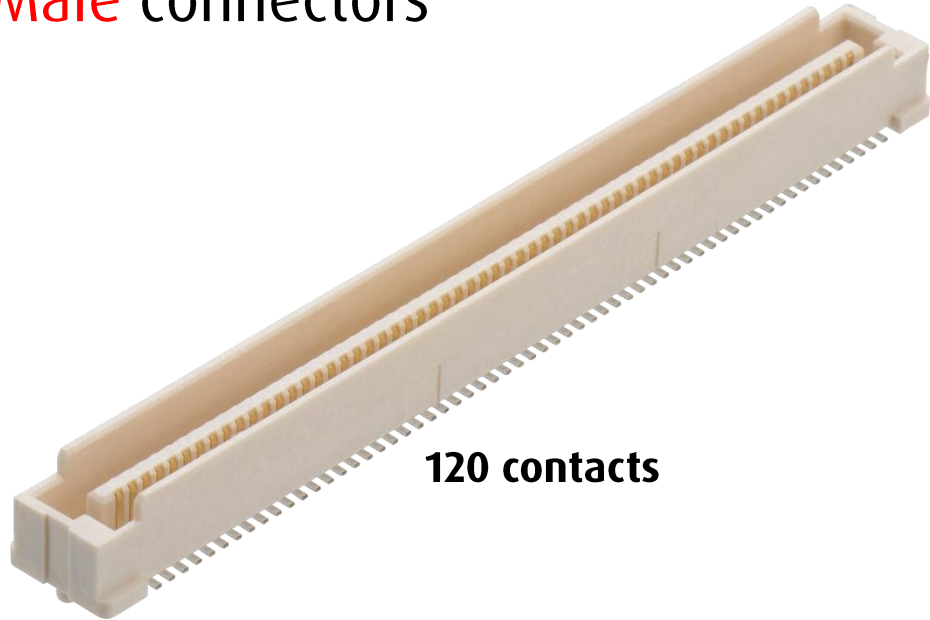
Female connectors have contacts facing inwards, with a slight bump for single contact connection to the mating male contact.

Archer .8

Male connectors



30 contacts



120 contacts

The male connectors are available in the same contact come in the following contact counts:

- [M58-3800342R](#) = 30 (15 + 15)
- [M58-3800642R](#) = 60 (30 + 30)
- [M58-3801042R](#) = 100 (50 + 50)
- [M58-3800442R](#) = 40 (20 + 20)
- [M58-3800842R](#) = 80 (40 + 40)
- [M58-3801242R](#) = 120 (60 + 60)

Male connectors have contacts facing outwards, with an outer shroud to ensure contacts are protected when the connectors are not mated.

Archer .8

Performance – Electrical Specifications

| | | |
|-----------------------|---|------------|
| Current Rating | 0.5A | EIA-364-70 |
| Contact Resistance | 50mΩ max (initial) 100mΩ max (final) | EIA-364-23 |
| Insulation Resistance | 1,000MΩ min | EIA-364-21 |
| Maximum Voltage | 500V AC | EIA-364-20 |

At 0.5A per contact, the performance of this range is equal to larger pitch connectors (such as 1.00mm and 1.25mm).

Consult the complete [Component Specification C053XX \(latest issue\)](#) for more information and other specifications.



Archer .8

Environmental & Mechanical Specifications

| | | |
|-----------------------|--|-----------------------|
| Operating Temperature | -40°C to +125°C | EIA-364-32 Cond. I |
| Durability | 30 mating cycles | EIA-364-09 |
| Vibration | 10-55-10Hz, 1.5mm P-P 6 hours total (2 hours per axis) | EIA-364-28 Cond. I |
| Shock | 50G (490m/s ²) 18 total shocks (6 per axis) | EIA-364-27 Cond. A |

With a high shock resistance and a wide operating temperature range, these connectors perform better than comparable industrial / commercial connectors at larger pitches.

Consult the complete [Component Specification C053XX \(latest issue\)](#) for more information and other specifications.



Archer .8

Environmentally friendly materials

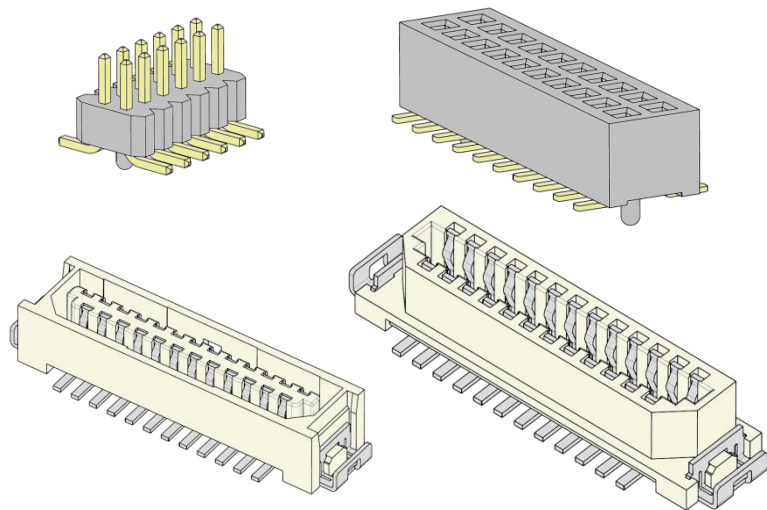


The materials used in the Archer .8 connectors do not contain any Lead, Halogens, Brominated Flame Retardants, Red Phosphor (PFOS/PFOA) or Antimony. They are fully RoHS Compatible and contain no REACH SVHCs.

This will help future-proof your design against material legislation requirements.

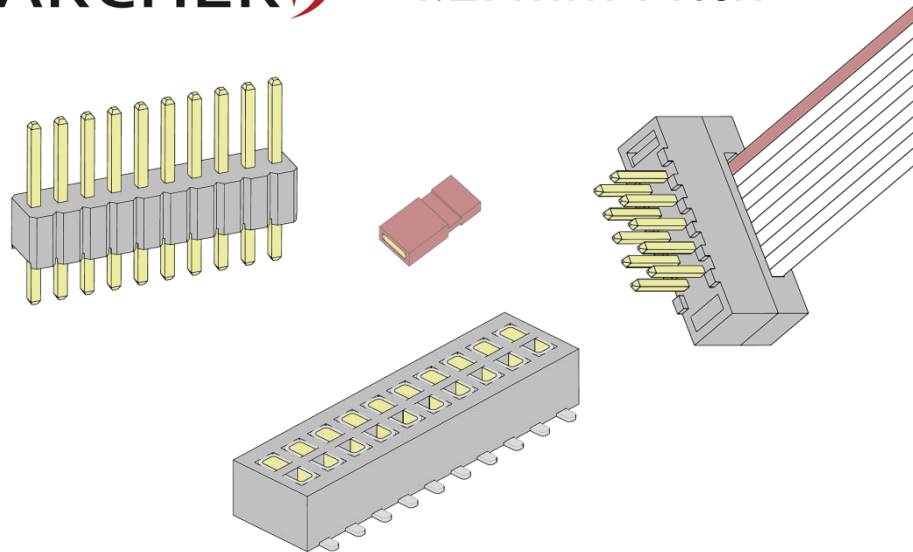
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Fine Pitch



- 1mm and 1.25mm pitch Industry Standard
- Pin header and Socket or single-contact connectors
- Discrete Cable connectors, pre-cabled contacts
- Vertical SMT options with low board-to-board heights
- Tape and Reel packaging options

ARCHER - 1.27mm Pitch



- 1.27mm pitch Industry Standard
- Pin header and Socket system, with Jumper Sockets
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