

Chip-Bridge Technologies

CB 260A999A

Host: 28-SOIC 7.5 x 18.7mm — Guest: 28-QFN 4 x 4mm



Adapter Interfaces

Table 1: Adapter Parameters

| Parameter | Host | Guest | Unit | |
|--------------|------------|-------|------|--|
| Package | SOIC | QFN | - | |
| Pin Count | 28 | 28 | _ | |
| Package Dim. | 7.5 x 18.7 | 4 x 4 | mm | |
| Pitch | 1.27 | 0.45 | mm | |

Features

- Drop-in adapter; Install 28-QFN 4 x 4mm on a 28-SOIC 7.5 x 18.7mm footprint
- Low profile adapter, 0.8mm
- Supports common manufacturing methods
- 1:1 Pinout Configuration

General Description

This device is a drop-in footprint to footprint adapter for your existing PBC design. Each Chip-Bridge Technologies adapter is designed to fit on the stated Host Footprint, and provide a Guest Footprint with electrical connections for your replacement IC.

Visit chipbridgetech.com/products to find our full product catalog. If you have questions or would like to request a design specific to your application, please contact our support team at support@chipbridgetech.com.

Chip-Bridge Technologies Adapaters are a patent pending design.

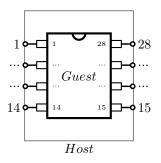
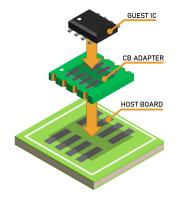


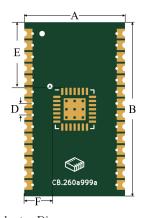
Figure 1: Adapter Pinout

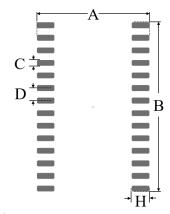
| Host Pins | Guest Pins | | | | |
|-----------|------------|--|--|--|--|
| 1 | 1 | | | | |
| 2 | 2 | | | | |
| 3 | 3 | | | | |
| 4 | 4 | | | | |
| | | | | | |
| 25 | 25 | | | | |
| 26 | 26 | | | | |
| 27 | 27 | | | | |
| 28 | 28 | | | | |

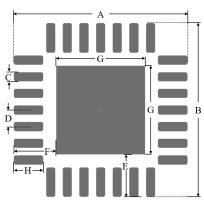
Table 2: Pin Configuration



Mechanical Specifications







(a) Adapter Diagram

(b) Host Footprint

(c) Guest Footprint

Figure 2: Mechanical Outline

Print version not to scale.

Table 3: Mechanical Specification

| | Units | A | В | C | D | E | F | G | Н | I |
|--------------------------|-------|------------------|------------------|------|------|-------|-------|-----|-----|---|
| $Adapter^1$ | mm | 11.0 ± 0.127 | 19.0 ± 0.127 | - | 1.27 | 3.150 | 7.145 | - | - | - |
| Host Footprint 1,2 | mm | 11.40 | 17.11 | 0.6 | 1.27 | - | - | - | 1.8 | - |
| Guest Footprint 1,3 | mm | 4.7 | 4.7 | 0.25 | 0.45 | 1.150 | 1.150 | 2.4 | 0.8 | - |

 $^{^1}$ Tolerances $\pm 0.1 \mathrm{mm}$ unless otherwise stated.

Trace Specifications

Table 4: Adapter Trace Specifications

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|--------------------------|-----------------|------|--------------|------|--------------------|------------|
| Trace Resistance | R_{trace}^{4} | 0.1 | 5.0 | 25.0 | $\mathrm{m}\Omega$ | 20°C |
| Trace to Trace Clearance | $d_{clearance}$ | | 150 ± 13 | | μm | |

⁴ Calculated values.

Datasheet Updates

The information in this document is subject to change without notice.

² Host IC Reference Drawing: digikey.com/htmldatasheets/production/755151/0/0/1/ak5394a.pdf

³ Guest IC Reference Drawing: microchip.com/downloads/en/DeviceDoc/Atmel-9505-AT42-QTouch-BSW-AT42QT1060_Datasheet.pdf