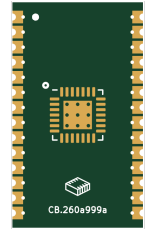# Chip-Bridge Technologies
CB SOIC-QFN-28-A

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.

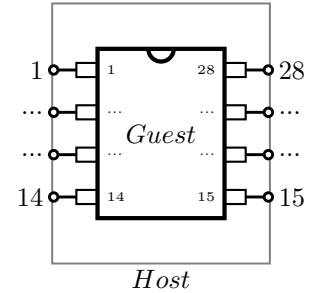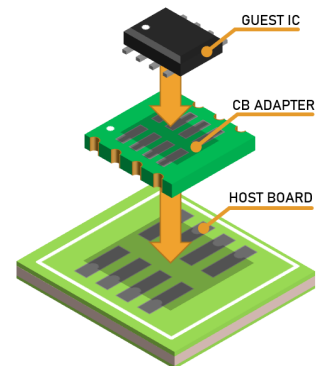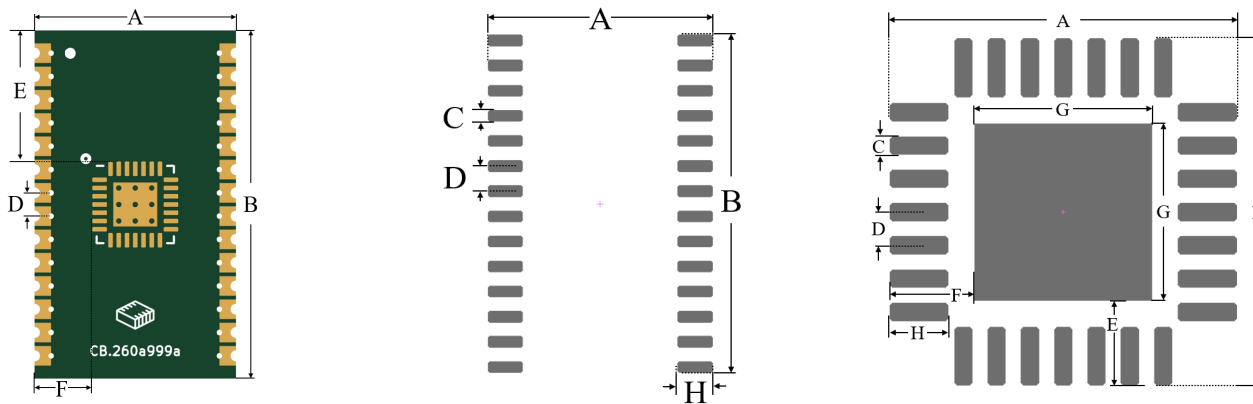**Chip-Bridge Technologies** Adapaters are a patent pending design.

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	B	C	D	E	F	G	H	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 ±0.1mm unless otherwise stated.
[2] Host IC Ref. Drawing: digikey.com/htmldatasheets/production/755151/0/0/1/ak5394a.pdf
[3] Guest IC Ref. Drawing: microchip.com/.../Atmel-9505-AT42-QTouch-BSW-AT42QT1060_Datasheet.pdf

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	mΩ	20°C
Trace to Trace Clearance	$d_{clearance}$		150 ± 13		μm	

[4] Calculated values.

Part Identifier

Printed Identifer: 260a999a

Datasheet Updates

You can find the latest datasheet at chipbridgetech.com/products.

Errata

1. v1.0: Initial Release

2. v1.1:

   - Add Errata section.
   - Update dead hyperlink to Host and Guest IC Reference Drawing.