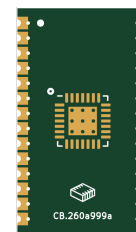


# Chip-Bridge Technologies CB SOIC-QFN-28-A

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](https://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](mailto:support@chipbridgetech.com).

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

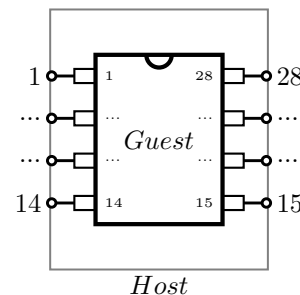
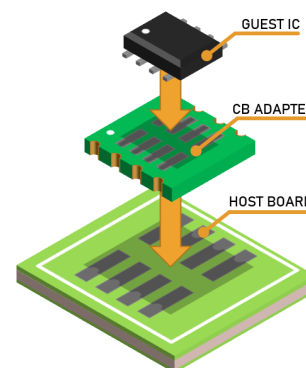


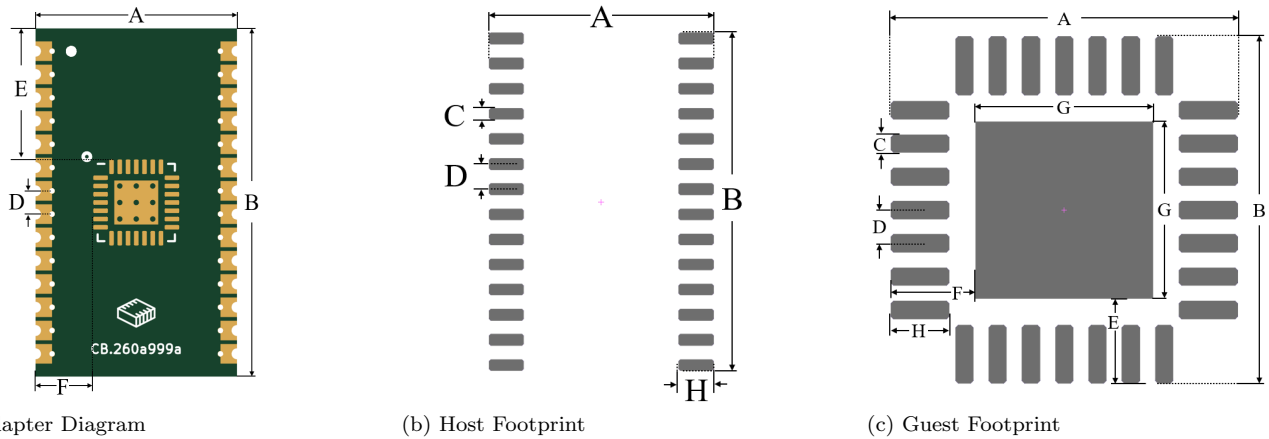
Figure 1: Adapter Pinout

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



**Figure 2: Mechanical Outline**

Print version not to scale.

**Table 3: Mechanical Specification**

	Units	A	B	C	D	E	F	G	H	I
Adapter <sup>1</sup>	mm	11.0 ± 0.127	19.0 ± 0.127	-	1.27	3.150	7.145	-	-	-
Host Footprint <sup>1,2</sup>	mm	11.40	17.11	0.6	1.27	-	-	-	1.8	-
Guest Footprint <sup>1,3</sup>	mm	4.7	4.7	0.25	0.45	1.150	1.150	2.4	0.8	-

<sup>1</sup> Tolerances ±0.1mm unless otherwise stated.

<sup>2</sup> Host IC Ref. Drawing: [digikey.com/htmldatasheets/production/755151/0/0/1/ak5394a.pdf](https://www.digikey.com/htmldatasheets/production/755151/0/0/1/ak5394a.pdf)

<sup>3</sup> Guest IC Ref. Drawing: [microchip.com/.../Atmel-9505-AT42-QTouch-BSW-AT42QT1060\\_Datasheet.pdf](https://www.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	$R_{trace}$ <sup>4</sup>	0.1	5.0	25.0	mΩ	20°C
Trace to Trace Clearance	$d_{clearance}$	150 ± 13			μm	

<sup>4</sup> Calculated values.

## Part Identifier

Printed Identifier: 260a999a

## Datasheet Updates

You can find the latest datasheet at [chipbridgetech.com/products](https://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.