

AP32008

TC1796 (B-step)

How to connect the EBU when it is not used?

Microcontrollers



TC1796 (B-step)

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1 Introduction

In some applications, the External Bus Unit (EBU) of the TC1796 is not used. It happens for example when only the internal flash is used, and no external memory and / or device is needed in addition to the TC1796. This application note provides some recommendations on how to connect the EBU pins when its functionality is not needed by the system. The recommendations below assume the EBU is not connected to any external bus. Besides, it is also assumed that the user does not intend to change the configuration of the EBU from its reset value.

2 Connection of the EBU

When the TC1796 is not connected to any external bus, the boot options shall be selected such that the “Normal Internal Start “ boot mode is selected and the EBU is configured after reset in “No bus” arbitration mode (EBU_CON.ARBMODE = 00B). See User’s Manual for details on the TC1796 boot options.

When no bus is connected to the EBU, it is recommended, as shown in **Figure 1**, to connect the EBU such that:

1. All its inputs are connected to GND (in order to avoid unpredictable behavior).
2. All its outputs and input /outputs are left open.

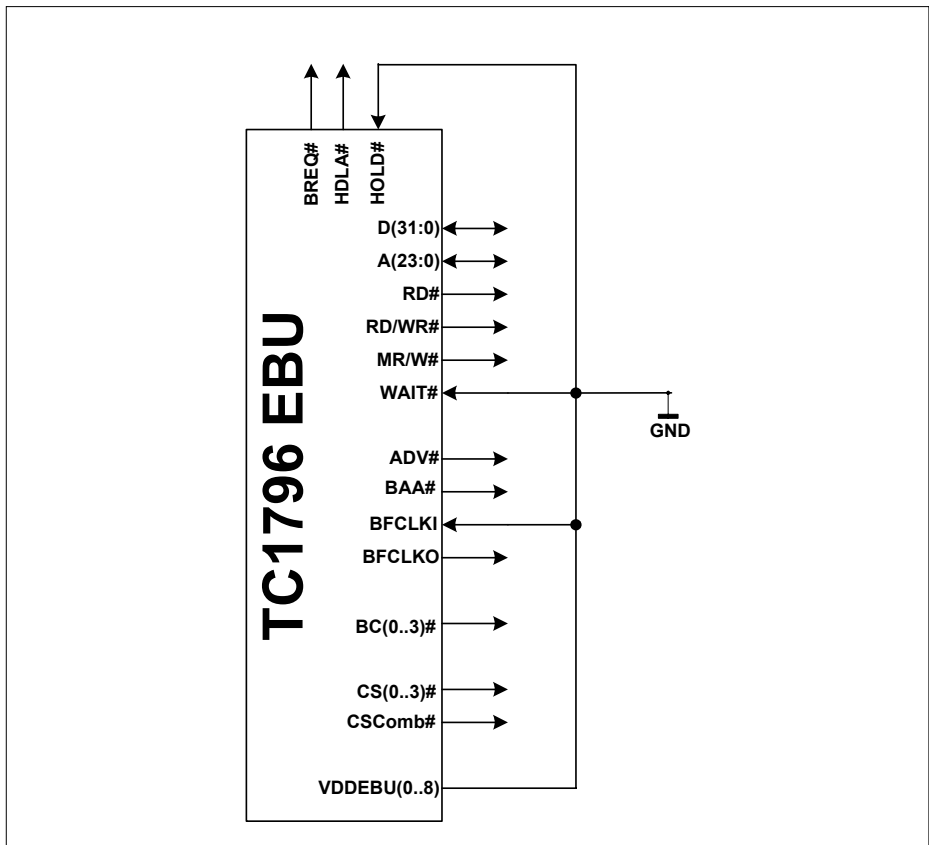


Figure 1 Recommended connection of the EBU

Signal connections are detailed in **Table 1**:

Table 1 Recommended connections of the EBU.

Signal	Description	Type	Connected to
VDDEBU(0..8)	EBU power supply Input.	Power supply	GND
HOLD#	Hold Request Input.	Input	GND
WAIT#	Wait Input.	Input	GND
BFCLKI	Burst Mode Flash Clock Input.	Input	GND
BREQ#	Bus Request Output.	Output	Open
HDLA#	Hold Acknowledge Output.	Output	Open
D(31:0)	EBU Data Bus Lines	Input/Output	Open
A(23:0)	EBU Address Bus Lines	Input/Output	Open
RD#	Read Control Line	Output	Open
RD/WR#	Write Control Line	Output	Open
MR/W#	Read/Write Control Line	Output	Open
ADV#	Address Valid Output.	Output	Open
BAA#	Burst Address Advance Output.	Output	Open
BDCLKO	Burst Mode Flash Clock Output.	Output	Open
BC(0..3)#	Byte Control Lines	Output	Open
CS(0..3)#	Chip Select Output Lines	Output	Open
CSCOMB#	Combined Chip Select Output	Output	Open

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