Pin differences between EV12DS130xZP and EV12DS400xZP

OVERVIEW

This document presents the pinout differences between the EV12DS130xZP (12 bits 3GSps DAC) and the EV12DS400xZP (12 bits 4.5GSps DAC). Both these devices are integrated in an fpBGA196 package. There are 7 pin differences which are presented below. Please refer to the latest available datasheet on http://www.e2v.com/products/semiconductors/broadband-data-converters/?resources#58 of the devices to look at their use.

EV12DS130xZP Pinout

The pinout of the EV12DS130xZP is shown below. The pin differences with the EV12DS400xZP are highlighted in red.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
A	DGND	B5	B6	B6N	B9	B9N	B11	C11	C9N	C9	C6N	C6	C5	DGND	A
B	B3	B4	B5N	B7	B8	B10	B11N	C11N	C10	C8	C7	C5N	C4	C3	B
C	B1N	B3N	B4N	B7N	B8N	B10N	DGND	DGND	C10N	C8N	C7N	C4N	C3N	C1N	C
D	B1	B2	B2N	DGND	DGND	VCCD	VCCD	VCCD	VCCD	DGND	DGND	C2N	C2	C1	D
E	A10N	B0	B0N	DGND	DGND	VCCD	VCCD	VCCD	VCCD	DGND	DGND	C0N	C0	D10N	E
F	A10	A11	A11N	VCCD	VCCD	AGND	AGND	AGND	AGND	VCCD	VCCD	D11N	D11	D10	F
G	A8	A8N	A9	A9N	DGND	AGND	AGND	AGND	AGND	DGND	D9N	D9	D8N	D8	G
H	A6	A6N	A7	A7N	DGND	AGND	AGND	AGND	AGND	DGND	D7N	D7	D6N	D6	H
J	A3N	A5	A5N	VCCA3	VCCA3	AGND	AGND	AGND	AGND	VCCA3	VCCA3	D5N	D5	D3N	J
K	A3	A4	A4N	DGND	DGND	AGND	VCCA5	VCCA5	AGND	DGND	DGND	D4N	D4	D3	K
L	A1N	A2	A2N	DGND	Diode	VCCA5	VCCA5	VCCA5	VCCA5	DGND	MUX	D2N	D2	D1N	L
M	A1	A0N	GA	HTVF	STVF	VCCA5	VCCA5	AGND	AGND	MODE0	MODE1	PSS2	D0N	D1	M
N	A0	DSPN	IDC_P	SYNCN	CLKN	AGND	AGND	AGND	AGND	AGND	AGND	OCDS1	OCDS0	D0	N
P	DGND	DSP	IDC_N	SYNC	CLK	AGND	AGND	AGND	OUT	OUTN	AGND	PSS0	PSS1	DGND	P
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	

Figure 1: EV12DS130xZP pinout view

EV12DS400xZP Pinout

The pinout of the EV12DS400xZP is shown below. The pin differences with the EV12DS130xZP are underlined in red.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
A	DGND	B5	B6	B6N	B9	B9N	B11	C11	C9N	C9	C6N	C6	C5	DGND	**A**
B	B3	B4	B5N	B7	B8	B10	B11N	C11N	C10	C8	C7	C5N	C4	C3	**B**
C	B1N	B3N	B4N	B7N	B8N	B10N	DGND	DGND	C10N	C8N	C7N	C4N	C3N	C1N	**C**
D	B1	B2	B2N	DGND	DGND	VCCD	VCCD	VCCD	VCCD	DGND	DGND	C2N	C2	C1	**D**
E	A10N	B0	B0N	DGND	DGND	VCCD	VCCD	VCCD	VCCD	DGND	DGND	C0N	C0	D10N	**E**
F	A10	A11	A11N	VCCD	VCCD	AGND	AGND	AGND	AGND	VCCD	VCCD	D11N	D11	D10	**F**
G	A8	A8N	A9	A9N	DGND	AGND	AGND	AGND	AGND	DGND	D9N	D9	D8N	D8	**G**
H	A6	A6N	A7	A7N	DGND	AGND	AGND	AGND	AGND	DGND	D7N	D7	D6N	D6	**H**
J	A3N	A5	A5N	VCCA3	VCCA3	AGND	AGND	AGND	AGND	VCCA3	VCCA3	D5N	D5	D3N	**J**
K	A3	A4	A4N	DGND	DGND	AGND	VCCA5	VCCA5	AGND	DGND	DGND	D4N	D4	D3	**K**
L	A1N	A2	A2N	DGND	Diode	VCCA5	VCCA5	VCCA5	VCCA5	DGND	sldn	D2N	D2	D1N	**L**
M	A1	A0N	NC	TVF	reset_n	VCCA5	VCCA5	AGND	AGND	sdata	sclk	PSS2	D0N	D1	**M**
N	A0	DSPN	IDC_P	SYNCN	CLKN	AGND	AGND	AGND	AGND	AGND	AGND	iref_test	OCDS	D0	**N**
P	DGND	DSP	IDC_N	SYNC	CLK	AGND	AGND	AGND	OUT	OUTN	AGND	PSS0	PSS1	DGND	**P**
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	

Figure 2: EV12DS400xZP pinout view

EV12DS130xZP – EV12DS400xZP pins difference

The 7 pin differences between EV12DS130xZP and EV12DS400xZP are summed up in the table below:

Pin number	EV12DS130XZP Signal name	EV12DS400XZP Signal name
L11	MUX	sldn
M3	GA	NC
M4	HTVF	TVF
M5	STVF	reset_n
M10	MODE0	sdata
M11	MODE1	sclk
N12	OCDS1	iref_test

Revision history

Revision	Date	Main Changes
A	September 2015	Creation