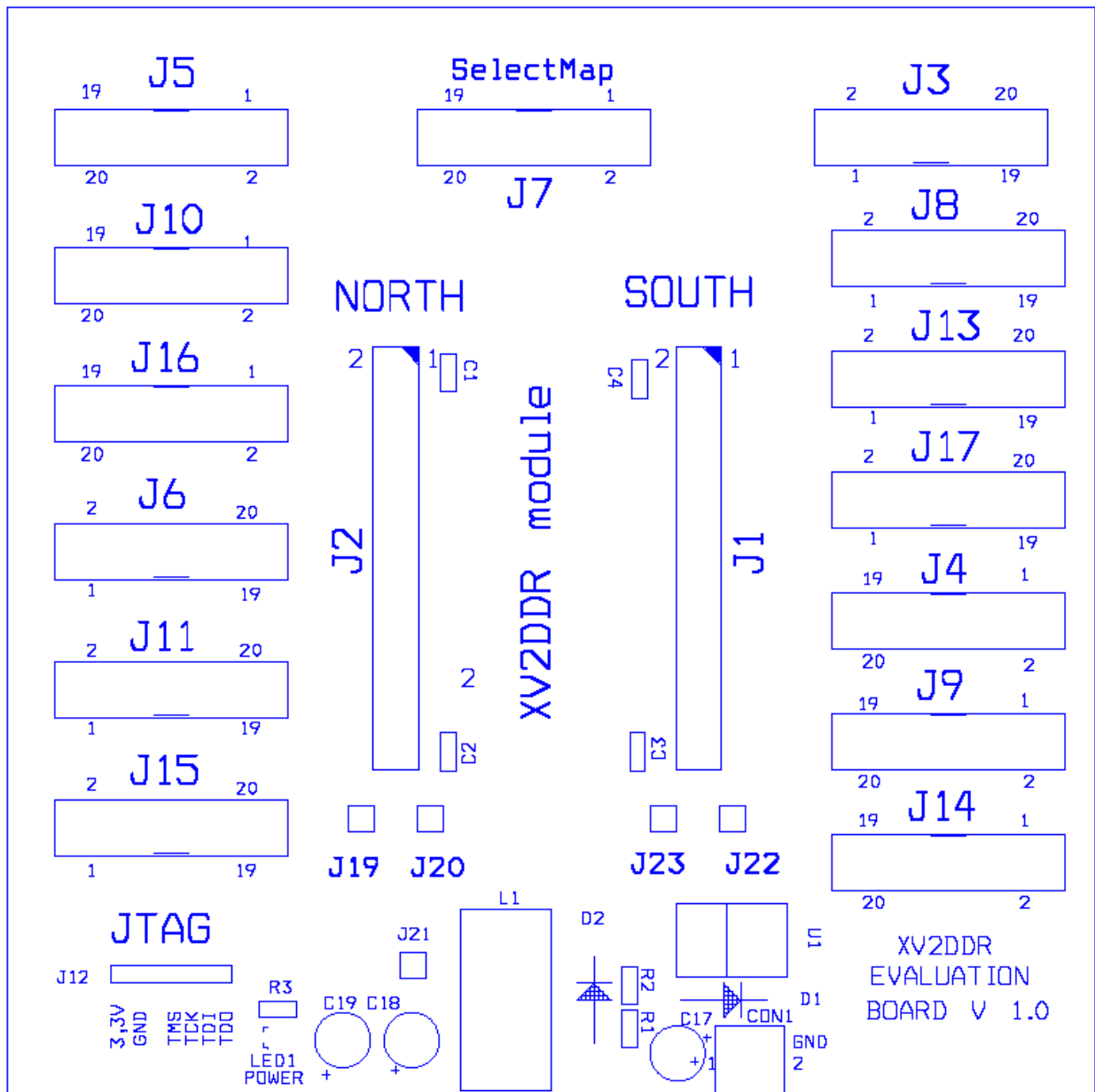


Overview

The X2VDDR_EVAL evaluation-board is a passive board with an integrated 3,3 Volt regulator. It has one connector to plug an XV2DDR module (sold separately). All signals of the module are connected to standard 100 mil (2,54 mm) headers.



Con1 Power Connector

Pin	Signal
1	Power Input
2	GND

Power Input: 6 VDC – 12 VDC.

This connector is used to power the XV2DDR-module. The on-board power regulator of the XV2DDR_EVAL reduces the input voltage to 3,3 Volt. Led 1 indicates the presence of power.

Caution: Input voltage levels outside the recommended range may damage the XV2DDR module !

J1 / J2 XV2DDR module Connector

Before plugging the XV2DDR module to this connectors, make sure the orientation of the module is correct. Carefully align the module's connectors to J1 / J2. Then press in the module firmly. If the module is not pressed in completely, some pins may have no connection.

J7 Select Map Connector

Pin	Signal	Module Pin	Virtex-II Pin
1	3,3 Volt	-	-
2	3,3 Volt	-	-
3	3,3 Volt	-	-
4	SM_D0 / (FPGA Bitstream)	N97	V18
5	SM_D1	N98	-
6	SM_D2	N99	-
7	SM_D3	N100	-
8	SM_D4	N57	-
9	SM_D5	N58	-
10	SM_D6	N55	-
11	SM_D7	N56	-
12	SM_CS _n	N54	-
13	INIT _n	N96	AA19
14	DONE	N8,N101	-
15	SM_RDWR _n	N53	-
16	SM_DOUT_BUSY	N95	AB19
17	FPGA_CCLK	N105	-
18	PROGRAMM	N103	-
19	GND	-	-
20	GND	-	-

J12 JTAG Connector

Pin	Signal
1	3,3 Volt
2	GND
3	- no pin -
4	TMS
5	TCK
6	TDI
7	TDO

To download a bitstream using a XILINX Download cable, connect the cable's flying leads to this connector. The JTAG-chain of the module includes a VIRTEX-II and a Flash Memory device.

J5 Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N9	U5
4	N10	V5
5	N11	V3
6	N12	V4
7	N13	W1
8	N14	W2
9	N15	U3
10	N17	U4
11	N18	V1
12	N19	V2
13	N20	U1
14	N21	U2
15	N22	R5
16	N23	T5
17	N24	T3
18	N26	T4
19	GND	-
20	GND	-

J10
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N27	T1
4	N28	T2
5	N29	R3
6	N30	R4
7	N31	R1
8	N32	R2
9	N33	P5
10	N34	P6
11	N35	P3
12	N36	P4
13	N37	P1
14	N39	P2
15	N40	N5
16	N41	N6
17	N42	N3
18	N43	N4
19	GND	-
20	GND	-

J6
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N68	AB7
4	N69	AA7
5	N70	U9
6	N72	V8
7	N73	Y8
8	N74	W8
9	N75	AB8
10	N76	AA8
11	N77	Y9
12	N78	W9
13	N79	AB9
14	N80	AA9
15	N81	V10
16	N83	V9
17	N84	Y10
18	N85	W10
19	GND	-
20	GND	-

J16
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N44	N1
4	N45	N2
5	N46	M5
6	N47	M6
7	N48	M3
8	N49	M4
9	N50	M1
10	N52	M2
11	N59	AB5
12	N60	AA3
13	N61	Y6
14	N63	W6
15	N64	AB6
16	N65	AA6
17	N66	Y7
18	N67	W7
19	GND	-
20	GND	-

J11
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N86	AB10
4	N87	AA10
5	N88	U11
6	N89	U10
7	N90	W11
8	N92	V11
9	N93	AA11
10	N94	Y11
11	N107	AA18
12	N109	AB18
13	N112	AA17
14	N113	AB17
15	N114	V16
16	N115	V15
17	N116	W16
18	N117	Y16
19	GND	-
20	GND	-

J15
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	N118	AA16
4	N119	AB16
5	N120	W15
6	N121	Y15
7	N123	AA15
8	N124	AB15
9	N125	U14
10	N126	V14
11	N127	W14
12	N128	Y14
13	N129	AA14
14	N130	AB14
15	N131	U13
16	N132	U12
17	N133	W12
18	N134	Y12
19	GND	-
20	GND	-

J8
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S21	G2
4	S22	G1
5	S23	H5
6	S24	J6
7	S26	H4
8	S27	H3
9	S28	H2
10	S29	H1
11	S30	J4
12	S31	J3
13	S32	J2
14	S33	J1
15	S34	J5
16	S35	K5
17	S36	K6
18	S37	L6
19	GND	-
20	GND	-

J3
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S4	E6
4	S5	E5
5	S6	D2
6	S7	D1
7	S8	E4
8	S9	E3
9	S10	E2
10	S11	E1
11	S12	F5
12	S13	G5
13	S14	F4
14	S15	F3
15	S17	F2
16	S18	F1
17	S19	G4
18	S20	G3
19	GND	-
20	GND	-

J13
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S39	K4
4	S40	K3
5	S41	K2
6	S42	K1
7	S43	L5
8	S44	L4
9	S45	L3
10	S46	L2
11	S47	B4
12	S48	A4
13	S49	C4
14	S50	C5
15	S52	D6
16	S53	C6
17	S54	B6
18	S55	A6
19	GND	-
20	GND	-

J17
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S56	E7
4	S57	E8
5	S58	D7
6	S59	C7
7	S60	B7
8	S61	A7
9	S63	D8
10	S64	C8
11	S65	B8
12	S66	A8
13	S67	E9
14	S68	F9
15	S69	D9
16	S70	C9
17	S72	B9
18	S73	A9
19	GND	-
20	GND	-

J9
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S92	E21
4	S93	E22
5	S94	F19
6	S95	F20
7	S96	F21
8	S97	F22
9	S98	G18
10	S99	H18
11	S100	G19
12	S101	G20
13	S103	G21
14	S104	G22
15	S105	H19
16	S106	H20
17	S107	H21
18	S108	H22
19	GND	-
20	GND	-

J4
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S74	E10
4	S75	F10
5	S76	D10
6	S77	C10
7	S78	B10
8	S79	A10
9	S80	E11
10	S81	F11
11	S83	D11
12	S84	C11
13	S85	C21
14	S86	C22
15	S87	D21
16	S88	D22
17	S89	E19
18	S90	E20
19	GND	-
20	GND	-

J14
Signal Connector

Pin	Module Pin	Virtex-II Pin
1	GND	-
2	GND	-
3	S109	J17
4	S110	J18
5	S112	J19
6	S113	J20
7	S114	J21
8	S115	J22
9	S116	K17
10	S117	K18
11	S118	K19
12	S119	K20
13	S120	K21
14	S121	K22
15	S123	L17
16	S124	L18
17	S125	L19
18	S126	L20
19	GND	-
20	GND	-