VDD33

1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k 1.2k

R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22

Parallel Port Test Point

R23 100 PWE
R24 100 PD0
R25 100 PD1
R26 100 PD2
R27 100 PD3
R28 100 PD4
R29 100 PD5
R30 100 PD6
R31 100 PD7
R32 100 PINT
R33 100 PWT
R34 100 PD0
R35 100 PSEL
R36 100 PDS
R37 100 PRS
R38 100 PAS

J1

GND

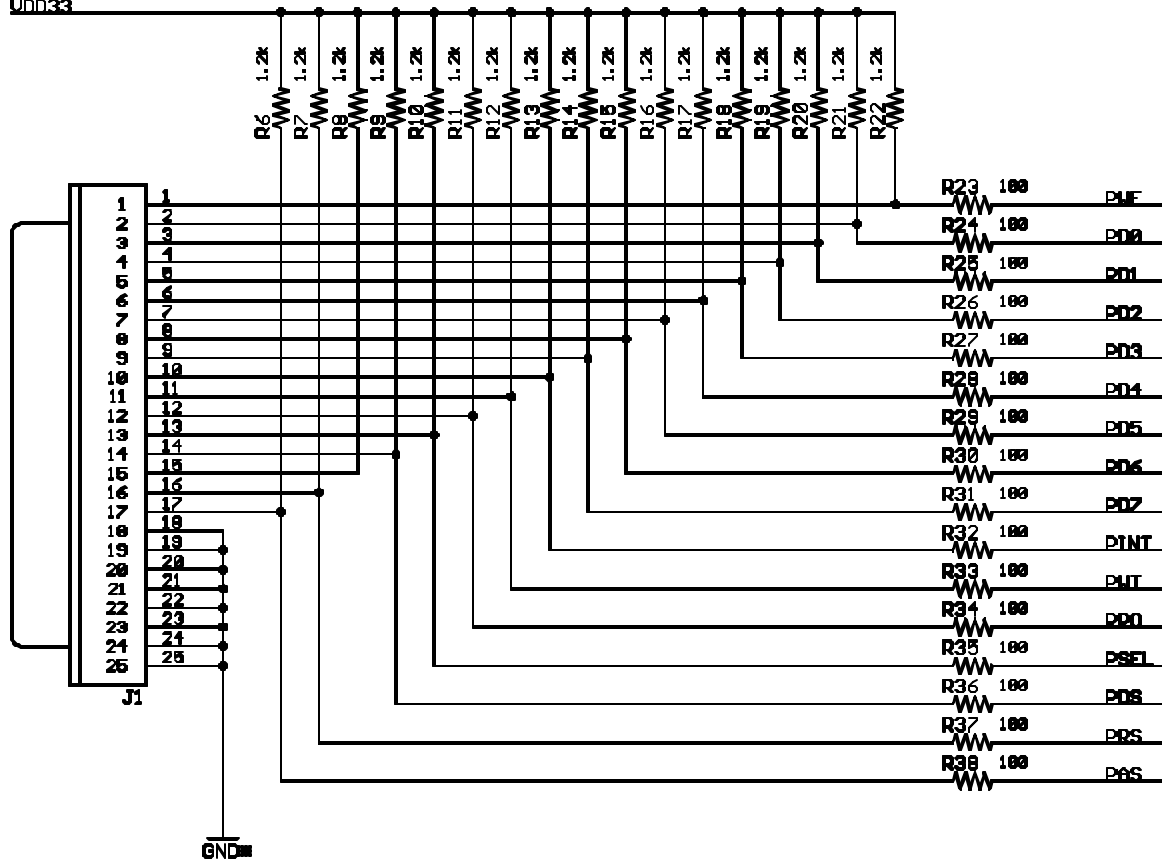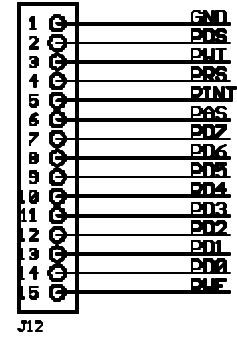| J12		
1	GND
2	PDS
3	PWT
4	PRS
5	PINT
6	PAS
7	PD7
8	PD6
9	PD5
10	PD4
11	PD3
12	PD2
13	PD1
14	PD0
15	PWE

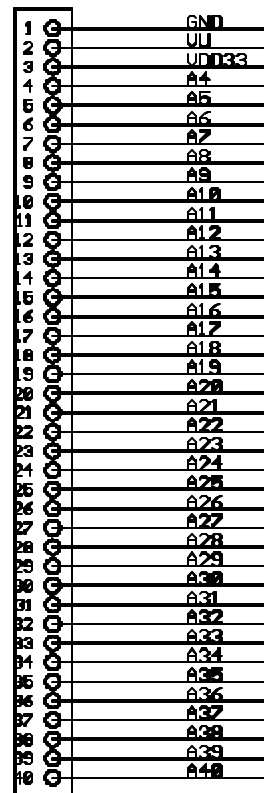Digilab IIE, FPGA Development Base Board
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Document Number: PB-500-008   REV: B

Date: 1/30/2002 03:07:22p   Sheet: 1/5

Power

Signal	Pins	Net
VCCO	13, 26, 38, 53, 66, 78, 91, 105, 118, 130, 143, 156, 171, 184, 195, 208	VDD33
VCCINT	14, 28, 42, 67, 76, 90, 119, 128, 142, 172, 186, 195	VDD18
GND	1, 12, 19, 25, 32, 39, 51, 65, 72, 79, 85, 92, 103, 117, 124, 131, 137, 144, 158, 170, 122, 183, 190, 197	GND*

Special Function
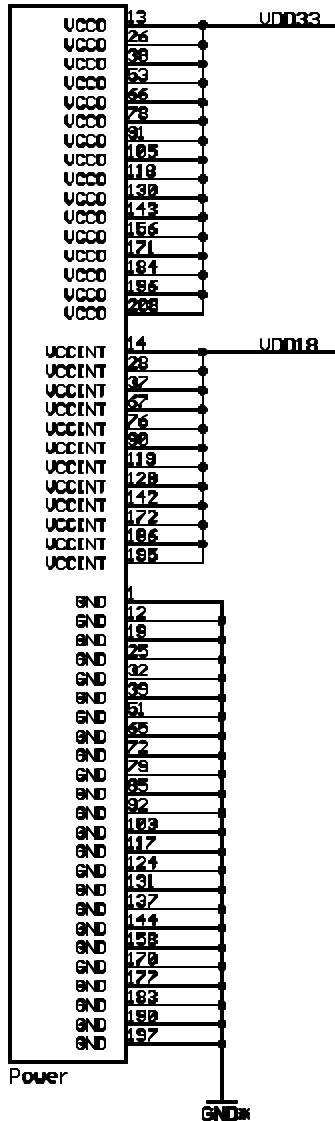
Pin name	Pin	Net
TMS	2	TMS
TDI	159	TDI
TDO	157	TDO
TCK	207	TCK
GCK0	80	CLK1
GCK1	77	BTN1
GCK2	182	B12
GCK3	185	B11
M0	52	MODE0
M1	50	MODE1
M2	54	MODE2
/PROGRAM	105	PROG
DONE	104	DONE
CCLK	155	CCLK
IO/INIT	107	INIT
IO/DOUT	154	C20
IO/DIN/D0	153	DIN
IO/D1	145	C28
IO/D2	141	C29
IO/D3	136	C34
IO/D4	126	C40
IO/D5	120	D7
IO/D6	116	D10
IO/D7	109	D18
IO/CS	160	C19
IO/WRITE	161	C18

General I/O

IO	Pin	Net
IO001	3	PWT
IO002	4	PINT
IO003	5	PD7
IO004	6	PD6
IO005	7	PD5
IO006	8	PD4
IO007	9	PD3
IO008	10	PD2
IO009	11	PD1
IO010	15	PD0
IO011	16	A40
IO012	17	A39
IO013	18	A38
IO014	20	A37
IO015	21	A36
IO016	22	A35
IO017	23	A34
IO018	24	A33
IO019	27	A32
IO020	29	A31
IO021	30	A30
IO022	31	A29
IO023	33	A28
IO024	34	A27
IO025	35	A26
IO026	36	A25
IO027	40	A24
IO028	41	A23
IO029	42	A22
IO030	43	A21
IO031	44	A20
IO032	45	A19
IO033	46	A18
IO034	47	A17
IO035	48	A16
IO036	49	A15
IO037	55	A14
IO038	56	A13
IO039	57	A12
IO040	58	A11
IO041	59	A10
IO042	60	A9
IO043	61	A8
IO044	62	A7
IO045	63	A6
IO046	64	A5
IO047	68	A4
IO048	69	LED1

General I/O

IO	Pin	Net
IO049	70	D39
IO050	71	D40
IO051	73	D37
IO052	74	D38
IO053	75	D35
IO054	81	D36
IO055	82	D33
IO056	83	D34
IO057	84	D31
IO058	86	D32
IO059	87	D29
IO060	88	D30
IO061	89	D27
IO062	93	D28
IO063	94	D25
IO064	95	D26
IO065	96	D23
IO066	97	D24
IO067	98	D21
IO068	99	D22
IO069	100	D19
IO070	101	D20
IO071	102	D17
IO072	108	D15
IO073	110	D16
IO074	111	D13
IO075	112	D14
IO076	113	D11
IO077	114	D12
IO078	115	D9
IO079	121	D8
IO080	122	D5
IO081	123	D6
IO082	125	D4
IO083	127	C39
IO084	129	C38
IO085	132	C37
IO086	133	C36
IO087	131	C35
IO088	136	C33
IO089	138	C32
IO090	139	C31
IO091	140	C30
IO092	146	C27
IO093	147	C26
IO094	148	C25
IO095	149	C24
IO096	150	C23

General I/O

IO	Pin	Net
IO097	151	C22
IO098	152	C21
IO099	162	C17
IO100	163	C16
IO101	164	C15
IO102	165	C14
IO103	166	C13
IO104	167	C12
IO105	168	C11
IO106	169	C10
IO107	173	C9
IO108	174	C8
IO109	175	C7
IO110	176	C6
IO111	178	C5
IO112	179	C4
IO113	180	B14
IO114	181	B13
IO115	187	B10
IO116	188	B9
IO117	189	B8
IO118	191	B7
IO119	192	B6
IO120	193	B5
IO121	194	B4
IO122	198	RS232_RTS_IN
IO123	199	RS232_CTS_OUT
IO124	200	RS232_DSR_OUT
IO125	201	RS232_TX_DATA
IO126	202	RS232_RX_DATA
IO127	203	PRS
IO128	204	PAS
IO129	205	PDS
IO130	206	PWE

XC2S200E-PQ208
IC1

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TITLE: DlabD2E

Document Number:	PB-500-008	REV: B

Date: 1/30/2002 03:07:22p	Sheet: 2/5

Connector A

Pin	Signal
1	GND
2	UU
3	UDD33
4	A4
5	A5
6	A6
7	A7
8	A8
9	A9
10	A10
11	A11
12	A12
13	A13
14	A14
15	A15
16	A16
17	A17
18	A18
19	A19
20	A20
21	A21
22	A22
23	A23
24	A24
25	A25
26	A26
27	A27
28	A28
29	A29
30	A30
31	A31
32	A32
33	A33
34	A34
35	A35
36	A36
37	A37
38	A38
39	A39
40	A40

J2

Connector B

Pin	Signal
1	GND
2	UU
3	UDD33
4	B4
5	B5
6	B6
7	B7
8	B8
9	B9
10	B10
11	B11
12	B12
13	B13
14	B14

J3

Connector C

Pin	Signal
1	GND
2	UU
3	UDD33
4	C4
5	C5
6	C6
7	C7
8	C8
9	C9
10	C10
11	C11
12	C12
13	C13
14	C14
15	C15
16	C16
17	C17
18	C18
19	C19
20	C20
21	C21
22	C22
23	C23
24	C24
25	C25
26	C26
27	C27
28	C28
29	C29
30	C30
31	C31
32	C32
33	C33
34	C34
35	C35
36	C36
37	C37
38	C38
39	C39
40	C40

J4

Connector D

Pin	Signal
1	GND
2	UU
3	UDD33
4	D4
5	D5
6	D6
7	D7
8	D8
9	D9
10	D10
11	D11
12	D12
13	D13
14	D14
15	D15
16	D16
17	D17
18	D18
19	D19
20	D20
21	D21
22	D22
23	D23
24	D24
25	D25
26	D26
27	D27
28	D28
29	D29
30	D30
31	D31
32	D32
33	D33
34	D34
35	D35
36	D36
37	D37
38	D38
39	D39
40	D40

J5

Connector E

Pin	Signal
1	GND
2	UU
3	UDD33
4	A4
5	A5
6	A6
7	A7
8	A8
9	A9
10	A10
11	A11
12	A12
13	A13
14	A14
15	A15
16	A16
17	A17
18	A18
19	A19
20	A20
21	A21
22	A22
23	A23
24	A24
25	A25
26	A26
27	A27
28	A28
29	A29
30	A30
31	A31
32	A32
33	A33
34	A34
35	A35
36	A36
37	A37
38	A38
39	A39
40	A40

J6

Connector F

Pin	Signal
1	GND
2	UU
3	UDD33
4	B4
5	B5
6	B6
7	B7
8	B8
9	B9
10	B10
11	B11
12	B12
13	B13
14	B14

J7

JTAG Programming Connector

Pin	Signal
1	TMS
2	TDI
3	TDO
4	TCK
5	GND
6	UDD33
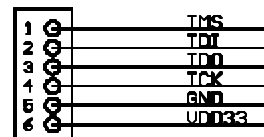
J10

Gate Array Mode Selection
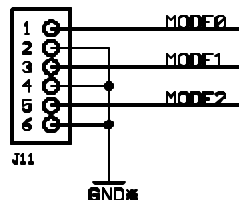
Pin	Signal
1	MODE0
2	
3	MODE1
4	
5	MODE2
6	

J11

GND*

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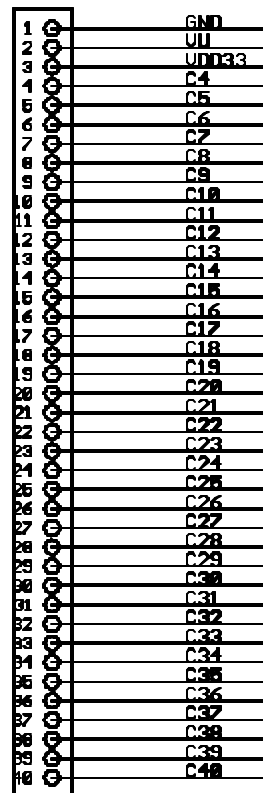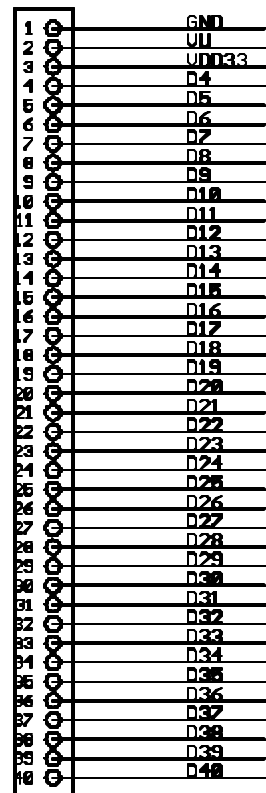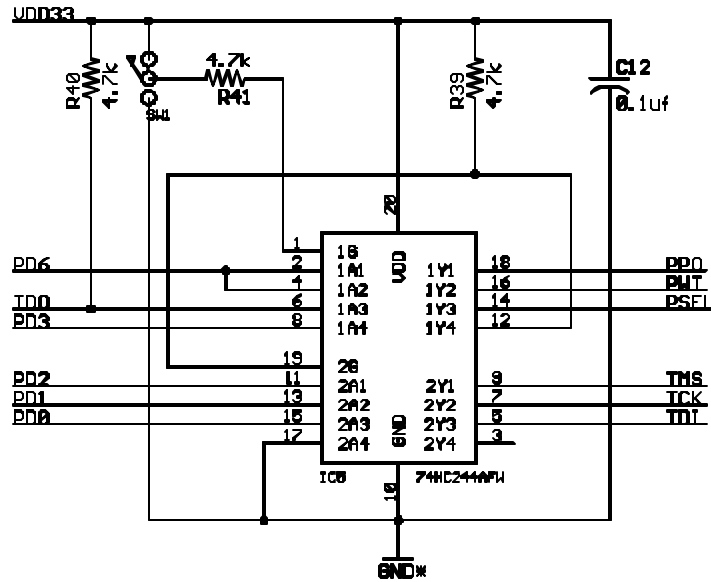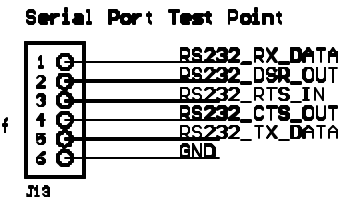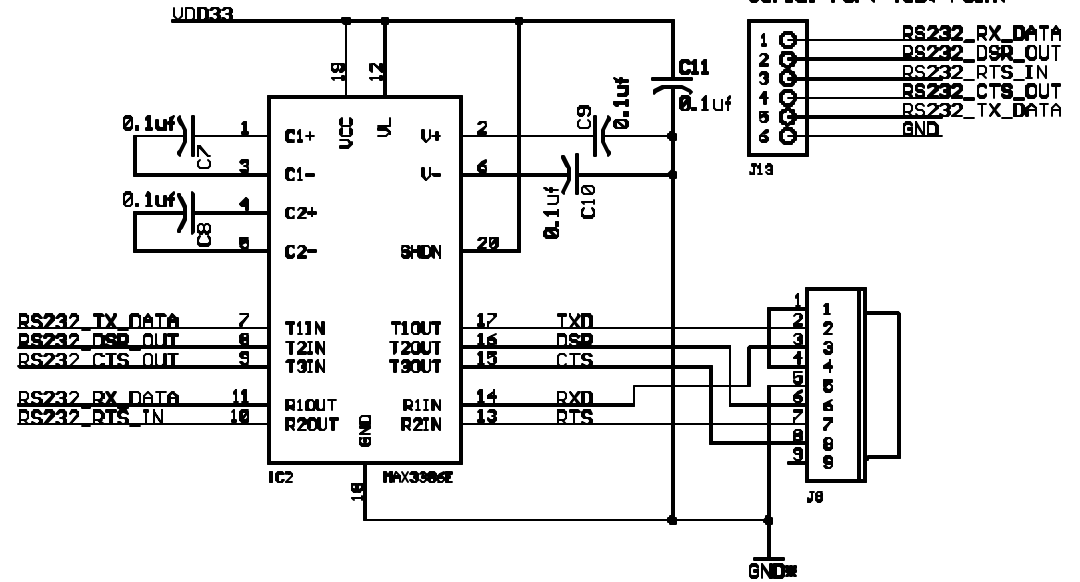
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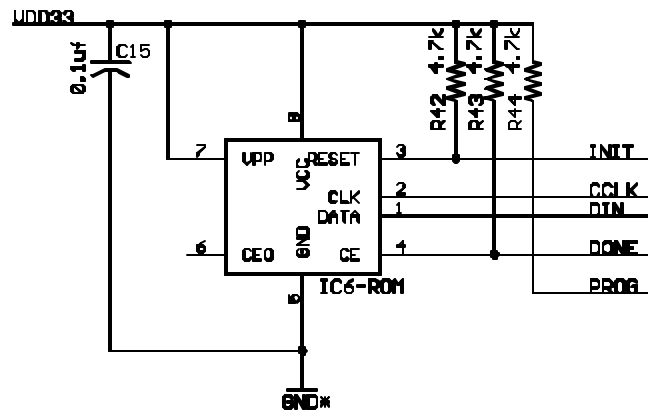Date: 1/30/2002 03:07:22p

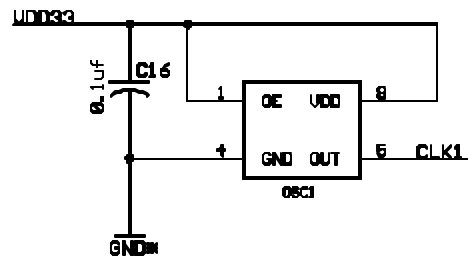Sheet: 3/5

JTAG Configuration Interface

UDD33

R40 4.7k
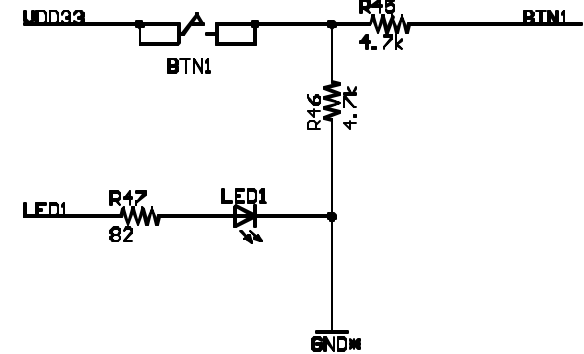SW1
4.7k R41
R39 4.7k
C12 0.1uf

IC5 74HC244AFW

PD6 — 2 — 1A1 — 1Y1 — 18 — PPO
— 4 — 1A2 — 1Y2 — 16 — PWT
TDO — 6 — 1A3 — 1Y3 — 14 — PSEL
PD3 — 8 — 1A4 — 1Y4 — 12

PD2 — 11 — 2A1 — 2Y1 — 9 — TMS
PD1 — 13 — 2A2 — 2Y2 — 7 — TCK
PD0 — 15 — 2A3 — 2Y3 — 5 — TDI
— 17 — 2A4 — 2Y4 — 3

GND

RS-232 Serial Interface

UDD33

IC2 MAX3386E

0.1uf C7 — 1 — C1+ — V+ — 2 — C9 0.1uf / C11 0.1uf
— 3 — C1- — V- — 6 — C10 0.1uf
0.1uf C8 — 4 — C2+
— 5 — C2- — SHDN — 20

RS232_TX_DATA — 7 — T1IN — T1OUT — 17 — TXD
RS232_DSR_OUT — 8 — T2IN — T2OUT — 16 — DSR
RS232_CTS_OUT — 9 — T3IN — T3OUT — 15 — CTS
RS232_RX_DATA — 11 — R1OUT — R1IN — 14 — RXD
RS232_RTS_IN — 10 — R2OUT — R2IN — 13 — RTS

GND

Serial Port Test Point

J19
1 RS232_RX_DATA
2 RS232_DSR_OUT
3 RS232_RTS_IN
4 RS232_CTS_OUT
5 RS232_TX_DATA
6 GND

J8

GND

Serial Configuration ROM

UDD33

0.1uf C15

IC6-ROM

R42 4.7k R43 4.7k R44 4.7k

7 — VPP — RESET — 3 — INIT
— CLK — 2 — CCLK
— DATA — 1 — DIN
6 — CEO — CE — 4 — DONE
— PROG

GND

Clock Oscillator

UDD33

0.1uf C16

OSC1

1 — OE — VDD — 8
4 — GND — OUT — 5 — CLK1

GND

Test I/O

UDD33

BTN1

R45 4.7k — BTN1

R46 4.7k

LED1 — R47 82 — LED1

GND

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Document Number: PB-500-008

REV: B

Date: 1/30/2002 03:07:22p   Sheet: 4/5

VU

J9

UDD33

3 IN OUT 2

ADJ TAB

UA33

R1
240

R2
332

C3
10uf

C13
10uf

C25
0.1uf

C26
0.1uf

C27
0.1uf

C28
0.1uf

C29
0.1uf

C30
0.1uf

C31
0.1uf

C32
0.1uf

C33
0.1uf

C34
0.1uf

C35
0.1uf

C36
0.1uf

C1
10uf

C2
10uf

UDD18

3 IN OUT 2

ADJ TAB

UA18

R3
240

R4
107

C6
10uf

C14
10uf

LED2

R5
82

C17
0.1uf

C18
0.1uf

C19
0.1uf

C20
0.1uf

C21
0.1uf

C22
0.1uf

C23
0.1uf

C24
0.1uf

C4
10uf

C5
10uf

GND*

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