Santa Cruz Connector Spec

Altera Corporation

Rev07

Spec written by: Kenyon Kluge

History

Rev01 - Spec was started 10/1/2002
Rev02 - added Santa Cruz long board spec 11/1/2002
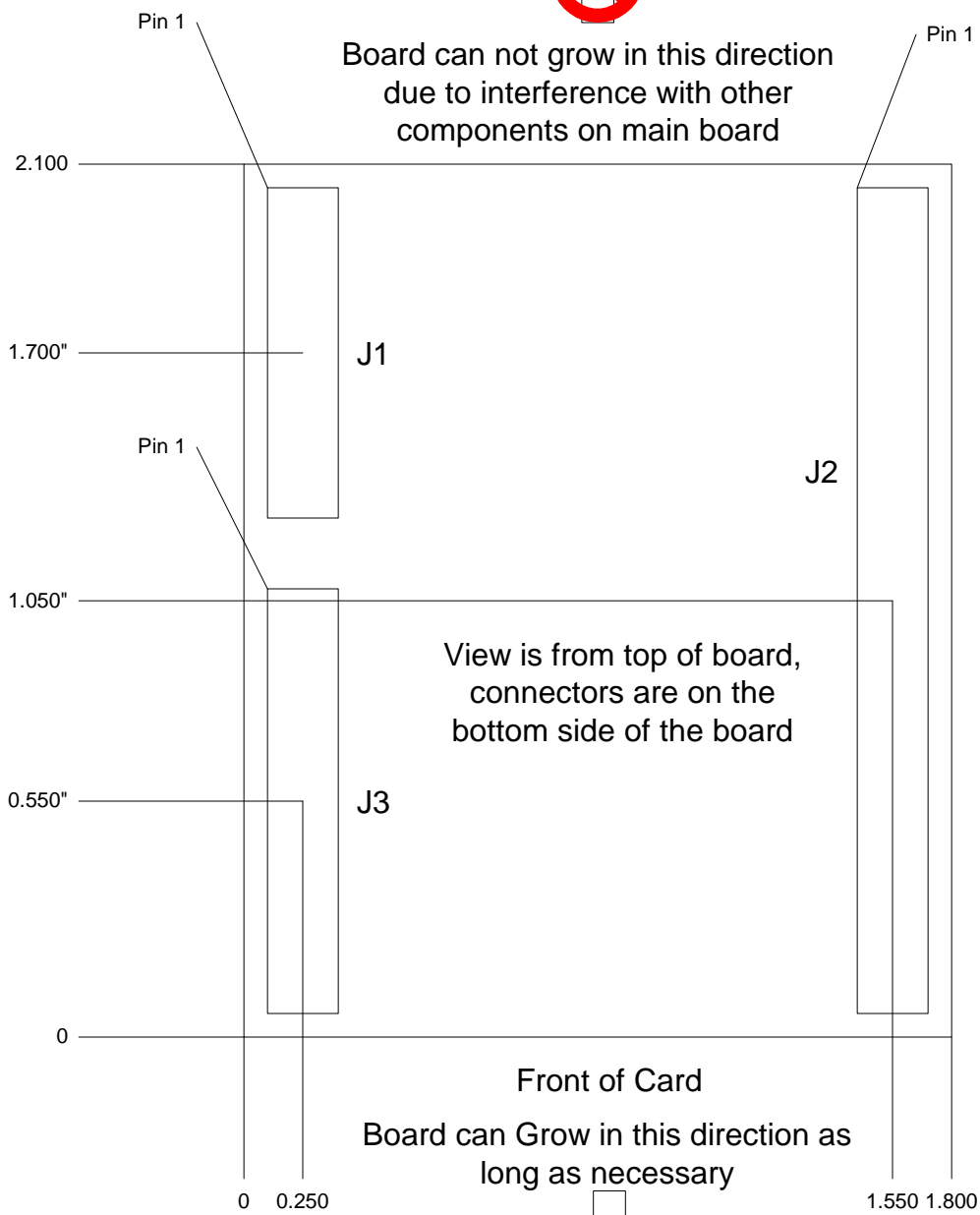Rev03 - Made some corrections and added detail to the spec 4/20/2003
Rev04 - Added a detail on how to grow the boards. 4/25/2003
Rev05 - Made some corrections added the TI EVM connectors and the ADI connectors 5/7/2003
Rev06 - Corrected pin 3 on J1 of SC header from NC to pin 40. Changed pin 2 on J1 from NC to VCC_5. Changed pins 15 17 and 19 on J3 from NC to VCC_3_3. 3/8/2004
Rev07 - Added Dual SC Board spacing page outlining the spacing between the two SC connectors. 3/23/2004
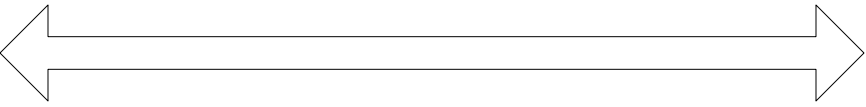
Santa Cruz Connector

Pin 1

Pin 1

Board can not grow in this direction
due to interference with other
components on main board

2.100

J1

1.700"

Pin 1

J2

1.050"

View is from top of board,
connectors are on the
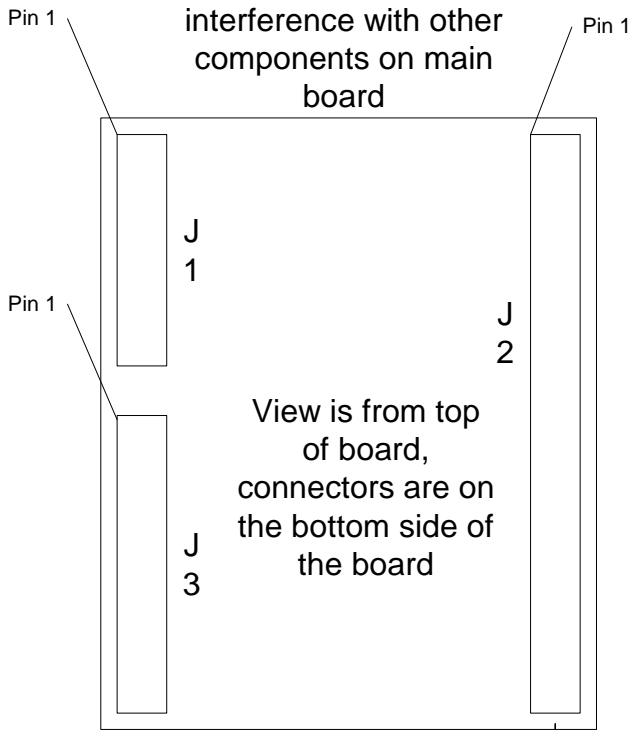bottom side of the board

0.550"

J3

0

Front of Card

Board can Grow in this direction as
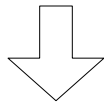long as necessary

0   0.250

1.550 1.800

Board can grow in either direction a long as necessary,
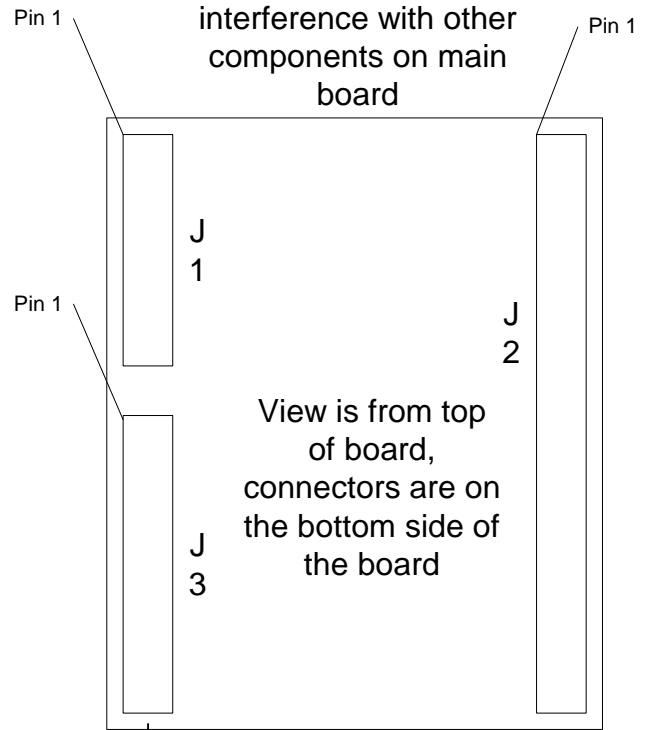but not in both directions on the same board.

Board can not grow in this direction due to interference with other components on main board

Pin 1

Pin 1

J 1

J 2

Pin 1

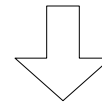View is from top of board, connectors are on the bottom side of the board

J 3

Front of Card
Board can Grow in this direction as long as necessary

0.650"

Board can not grow in this direction due to interference with other components on main board

Pin 1

Pin 1

J 1

J 2

Pin 1

View is from top of board, connectors are on the bottom side of the board

J 3

Front of Card
Board can Grow in this direction as long as necessary

Santa Cruz Connector Pinout

J1

GND	1 2	VCC_5
PROTOIO40	3 4	PROTOIO29
PROTOIO30	5 6	PROTOIO31
PROTOIO32	7 8	PROTOIO33
PROTOIO34	9 10	PROTOIO35
PROTOIO36	11 12	PROTOIO37
PROTOIO38	13 14	PROTOIO39

J2

RESET-	1 2	GND
PROTOIO0	3 4	PROTOIO1
PROTOIO2	5 6	PROTOIO3
PROTOIO4	7 8	PROTOIO5
PROTOIO6	9 10	PROTOIO7
PROTOIO8	11 12	PROTOIO9
PROTOIO10	13 14	PROTOIO11
PROTOIO12	15 16	PROTOIO13
PROTOIO14	17 18	PROTOIO15
GND	19 20	NC
PROTOIO16	21 22	GND
PROTOIO17	23 24	GND
PROTOIO18	25 26	GND
PROTOIO19	27 28	PROTOIO20
PROTOIO21	29 30	GND
PROTOIO22	31 32	PROTOIO23
PROTOIO24	33 34	GND
PROTOIO25	35 36	PROTOIO26
PROTOIO27	37 38	CARDSEL-
PROTOIO28	39 40	GND

J3

Vunreg	1 2	GND
NC	3 4	GND
VCC3_3	5 6	GND
VCC3_3	7 8	GND
OSC	9 10	GND
CLK1	11 12	GND
CLK2	13 14	GND
VCC3_3	15 16	GND
VCC3_3	17 18	GND
VCC3_3	19 20	GND

Santa Cruz Long Connector
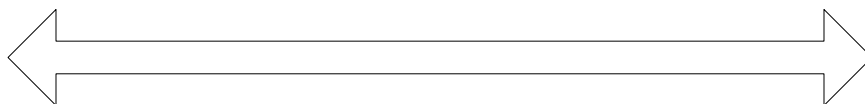
Board can not grow in this direction
due to interference with other
components on main board

Pin 1

Pin 1

Pin 1

2.100

J1

1.700"

J4

J2

Pin 1

1.050"

J3

View is from top of board,
connectors are on the
bottom side of the board

0.550"

0

Front of Card

0   0.250

1.550

2.850   3.100
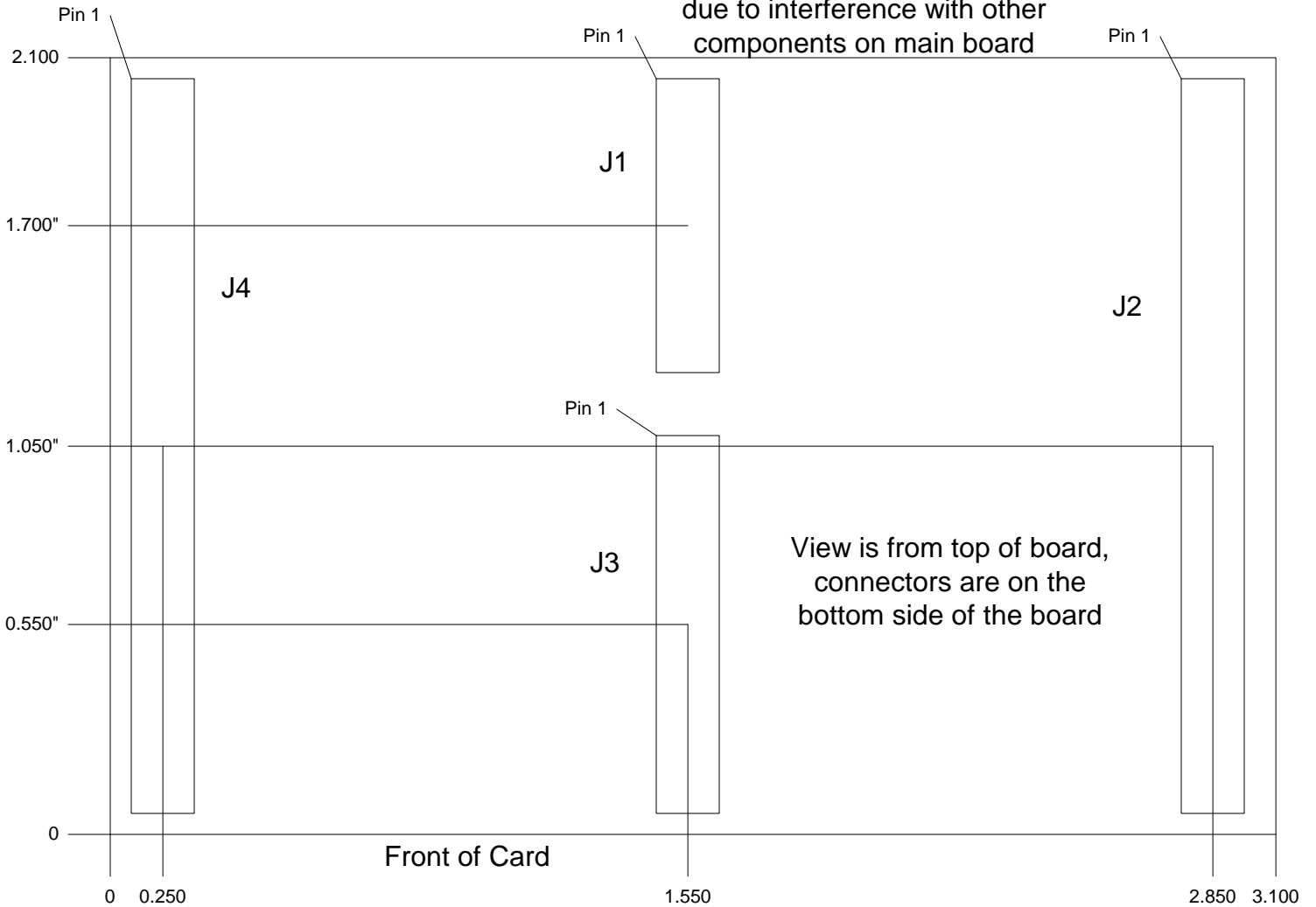
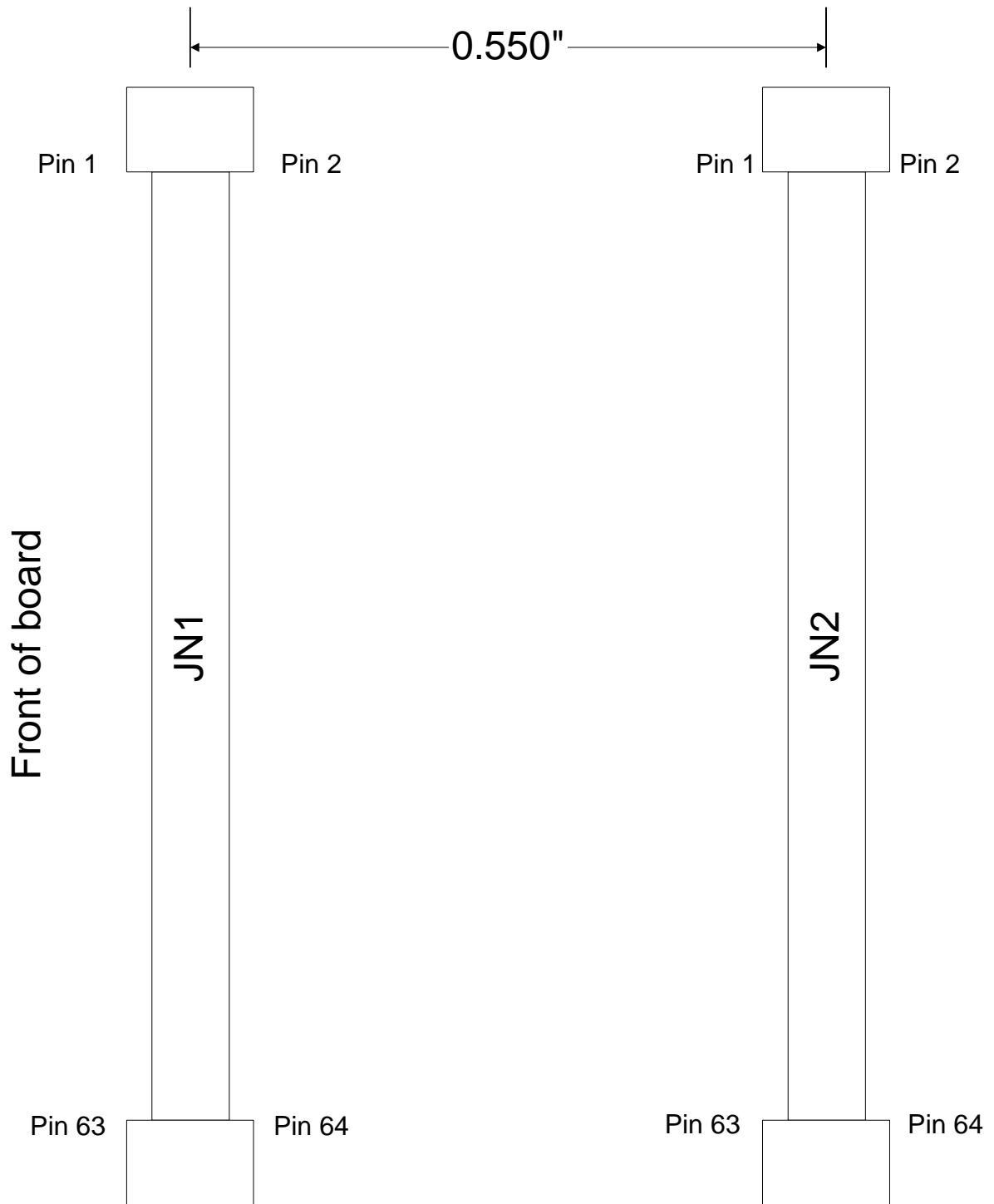Board can Grow in this direction as
long as necessary
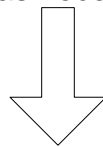
Board can grow in either direction a long as necessary,

Santa Cruz Long Connector Pinout

J4

Note: For Santa Cruz Long
Connector J1, J2, and J3
are the same pinout as on
the regular SC Connector

Left	Pin	Pin	Right
GND	1	2	GND
IO	3	4	IO
IO	5	6	IO
IO	7	8	IO
IO	9	10	IO
IO	11	12	IO
GND	13	14	GND
IO	15	16	IO
IO	17	18	IO
IO	19	20	IO
IO	21	22	IO
IO	23	24	IO
IO	25	26	IO
GND	27	28	GND
IO	29	30	IO
IO	31	32	IO
IO	33	34	IO
IO	35	36	IO
IO	37	38	IO
GND	39	40	GND

0.550"

Front of board

Pin 1   Pin 2   Pin 1   Pin 2

JN1   JN2

Pin 63   Pin 64   Pin 63   Pin 64

PMC Expansion
board Headers

Pin 80

Pin 2

Pin 79

Pin 1

3"

Socket Connectors go on the top of
the board
This is the view looking at the top of
the board

Pin 80

Pin 2

Pin 79

Pin 1

Pin 79

Pin 1

Pin 80

Pin 2

3"

Terminal Connectors go on the
bottom of the board
This is the view looking at the bottom
of the board

Pin 79

Pin 1

Pin 80

Pin 2
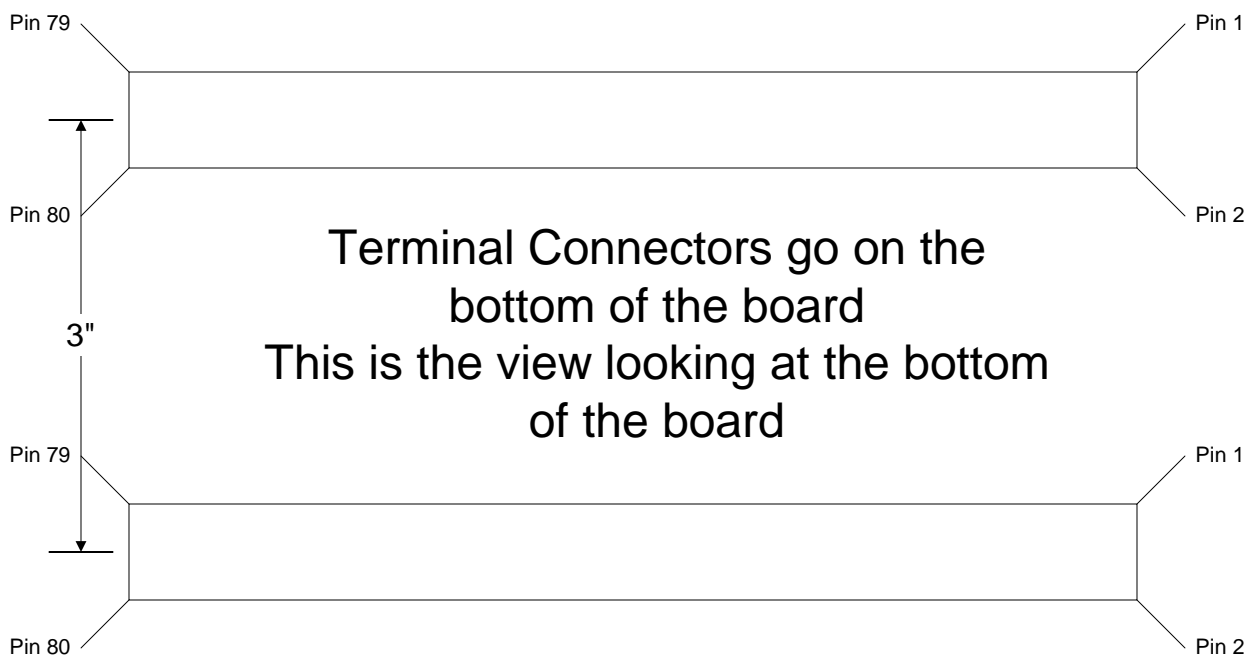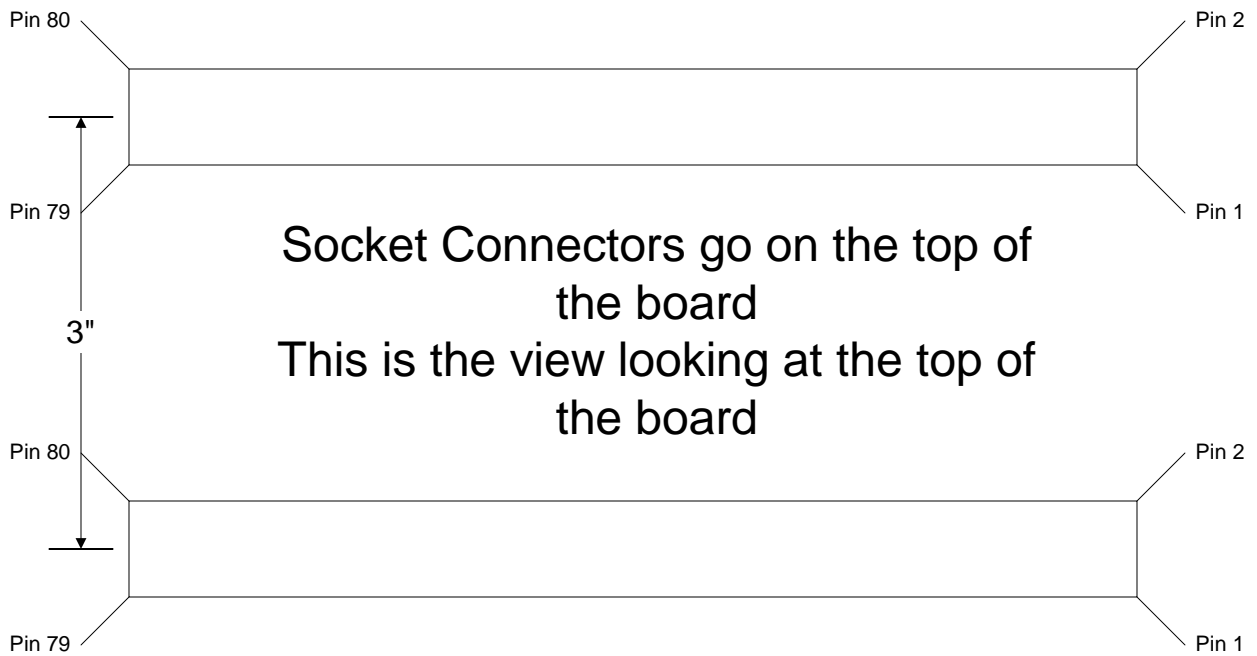
ADI Connectors are placed on the top side
of the board. They connect to the ADI card
with cables so their placement does not
need to be precise

Pin 2   Pin 40   Pin 2   Pin 40

Pin 1   Pin 39   Pin 1   Pin 39