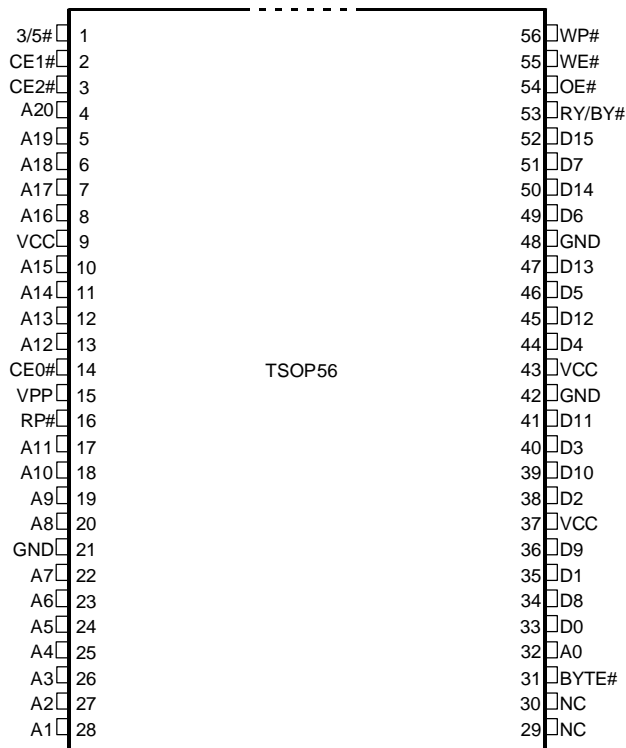


TSOP 56-CP

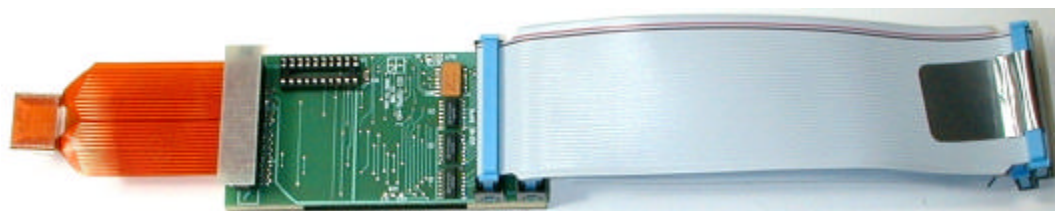
Memory Footprint



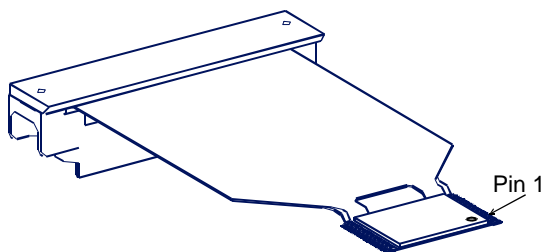
- 56 pin TSOP, 16 bit memories
- Probe plugs into Meritec socket (Meritec Part # 980020-56)
- Maximum memory size 4M Bytes
- Organized as 2M x 16 bit
- Maximum PromICE: P2160
- For **3 Volt parts**, use 3 Volt adapter (GEI Part # 3VA16DC)

Note: Maximum memory size is shown in footprint. For smaller memories, unused lines must be connected to V_{cc} to ensure proper PromICE operation.

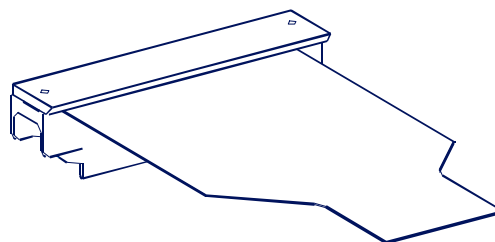
Complete Cable Assembly



TSOP Flex Probes



Correct Probe – The probe shipped with this cable is intended for insertion in a Meritec socket. Instructions for inserting this probe are included with the probe and in this document.



Wrong Probe – This probe is designed to be soldered directly to the PCB. If you received this probe in error, do not attempt to insert it in a socket. Contact Grammar Engine for an exchange.

Memories Supported

- www.promice.com/memories contains a listing of all memories supported by Grammar Engine target cables. **Note:** This cable supports both ROM and flash memories. Flash signals RY/BY#, RP#, WP#, 3/5#, VPP, BYTE#, and RESET# are shown on the cable schematic but are not connected to PromICE. PromICE emulates Flash memory as a ROM when used with this cable.
- Emulates devices like 28F016; 28F032 and others.

**For Technical Support, contact Grammar Engine at 614-899-7878 or support@gei.com
For Sales, contact Grammar Engine Inc. www.gei.com or 1.800.PROMICE.**

Notes and Precautions

Always turn target power OFF when connecting or disconnect PromICE target cables.

If your target has capacitors, allow sufficient discharge time. Connecting with the power on can damage cables or the PromICE.

Important Note: The TSOP plug-in flex probe will work only with Meritec TSOP sockets

This probe cannot be used with any other company's TSOP socket. Insertion in any other manufacturer's socket, or attempting to solder a plug-in probe. Will damage the probe and void its warranty.

Do not hand solder Meritec sockets on your PCB

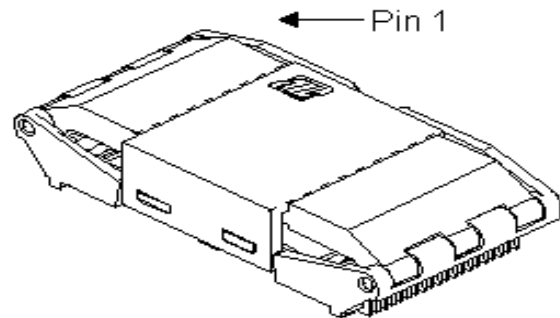
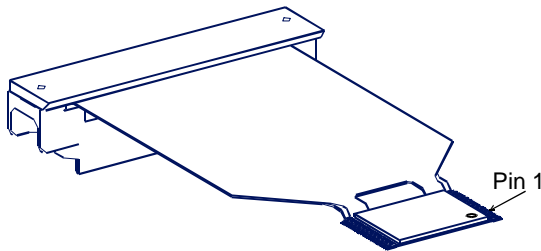
The Meritec sockets were designed to be placed on the PCB via reflow. **DO NOT ATTEMPT TO HAND SOLDER THE SOCKET TO YOUR PCB:** solder can wick up into the socket and damage the probe when it is inserted.
If you need assistance (including custom socket connection services, contact AlpTex at 440.437.5570

Handle the TSOP Flex Probe with care.

Carefully review the flex probe application notes (under the foam in the plastic box) before proceeding. Retain the plastic box to store flex probe when not in use. Damage to the flex probe through mishandling is not covered in your PromICE warranty or support policy. **Once the seal on the case is broken, Grammar Engine Inc. cannot accept returns of flex probes.**

Installation Instructions

Step	Action	Notes
1.	Verify that you have the correct cable for the memory you are emulating.	If you have the wrong cable, contact Grammar Engine or your distributor for a replacement.
2.	Connect PromICE.	With the power off to your PromICE, connect the shielded ground plane cables to your PromICE.
3.	Connect the adapter board to the Flex Probe.	Connect the female connector on the Flex Probe to the male connector on the adapter board. Be careful to align the connectors carefully to avoid damaging the pins on the adapter board.
4.	Align Flex Probe in TSOP socket	Remove the TSOP Flex Probe from its protective case. Locate pin 1 on the probe and identify the corresponding pin in your socket.



(open side showing)

If you are unsure of the correct orientation, consult the cable schematic and the schematic of your target board. The flex probe must emerge from the "open" side of the socket.

Lower the TSOP socket vertically and seat it in the socket.

Inspect (with a magnifier if necessary) to confirm that each pin is fully seated in the socket. Do not insert the probe at an angle, since this can damage individual pins.

5.	Close the TSOP socket lids.	<p>Lower the lids until they are almost closed and the cam underneath each lid engages. From that point, close the lids together and latch. DO NOT FORCE THE LIDS CLOSED-THIS WILL DAMAGE THE PROBE. If they do not close easily, open the lids and reseat the probe in the bottom of the socket.</p> <p>Once the probe is seated successfully in the socket, do not pull or put any twisting force on the Probe.</p> <p>If possible, avoid repeatedly removing and reinserting the probe in the socket.</p>
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You are now ready to power up your target and PromICE. Please consult your PromICE manual for further setup information.

Contact your Grammar Engine Sales Representative to order these parts and accessories:

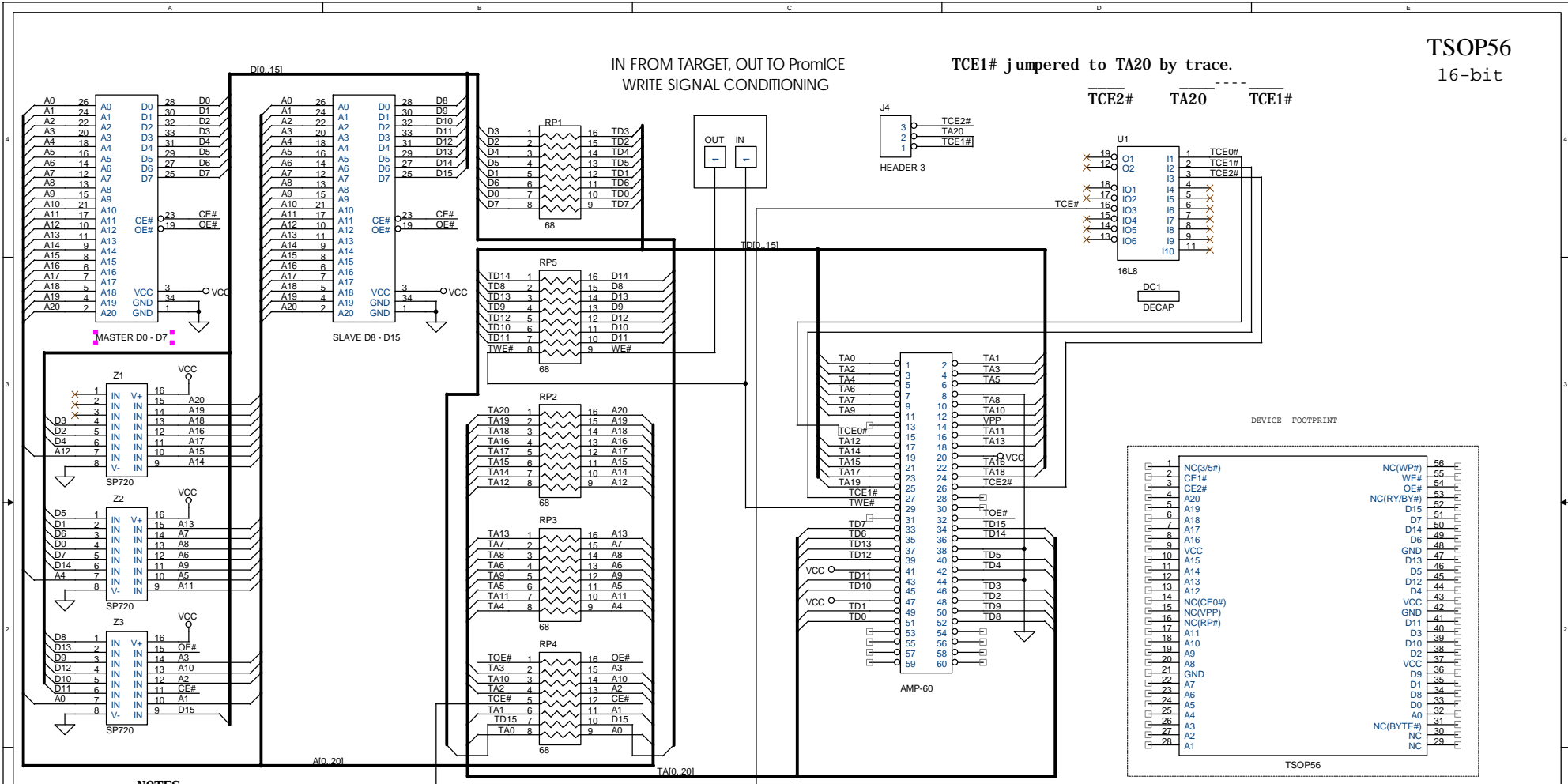
Cable Parts	TSOP56 BD 34FFEXT 34FF6.7EXT TSOP56CPH PAL10	Adapter Board 6" Shielded Ground Plane Cable 6.75" Shielded Ground Plane Cable 56 pin TSOP plug-in flex probe (AlpTex #923712-56) PAL
Accessories	3VA16DC	3 Volt Adapter

**For Technical Support, contact Grammar Engine at 614-899-7878 or support@gei.com
 For Sales information, contact Grammar Engine Inc. at 1.800.PROMICE.**

TSOP56
16-bit

IN FROM TARGET, OUT TO PromICE
WRITE SIGNAL CONDITIONING

TCE1# jumpered to TA20 by trace.



DEVICE FOOTPRINT

1	NC(3/5#)	56	NC(WP#)
2	CE1#	55	WE#
3	CE2#	54	OE#
4	A20	53	NC(RY/BY#)
5	A19	52	D7
6	A18	51	D5
7	A17	50	D14
8	A16	49	D6
9	A15	48	GND
10	A14	47	D15
11	A13	46	D5
12	A12	45	D12
13	A11	44	D4
14	A10	43	VCC
15	NC(CE#)	42	GND
16	NC(VPP)	41	D11
17	NC(RP#)	40	D3
18	A9	39	D10
19	A8	38	D2
20	GND	37	VCC
21	A7	36	D9
22	A6	35	D8
23	A5	34	D3
24	A4	33	A0
25	A3	32	AO
26	A2	31	NC
27	A1	30	NC(BYTE#)
28		29	NC

TSOP56

NOTES:

- MAX SIZE: 4MB (2M x 16) (P2160)
- SUPPORTS: 16 bit 56 pin TSOPs
- PROMICE JUMPER SETTING: 32
- PAL Equation: $CE = !(CE0 \& !(CE1 \# CE2))$
- PromICE A0 connected to TSOP A1
- 3V ROMs require a 3V PAL on adapter.

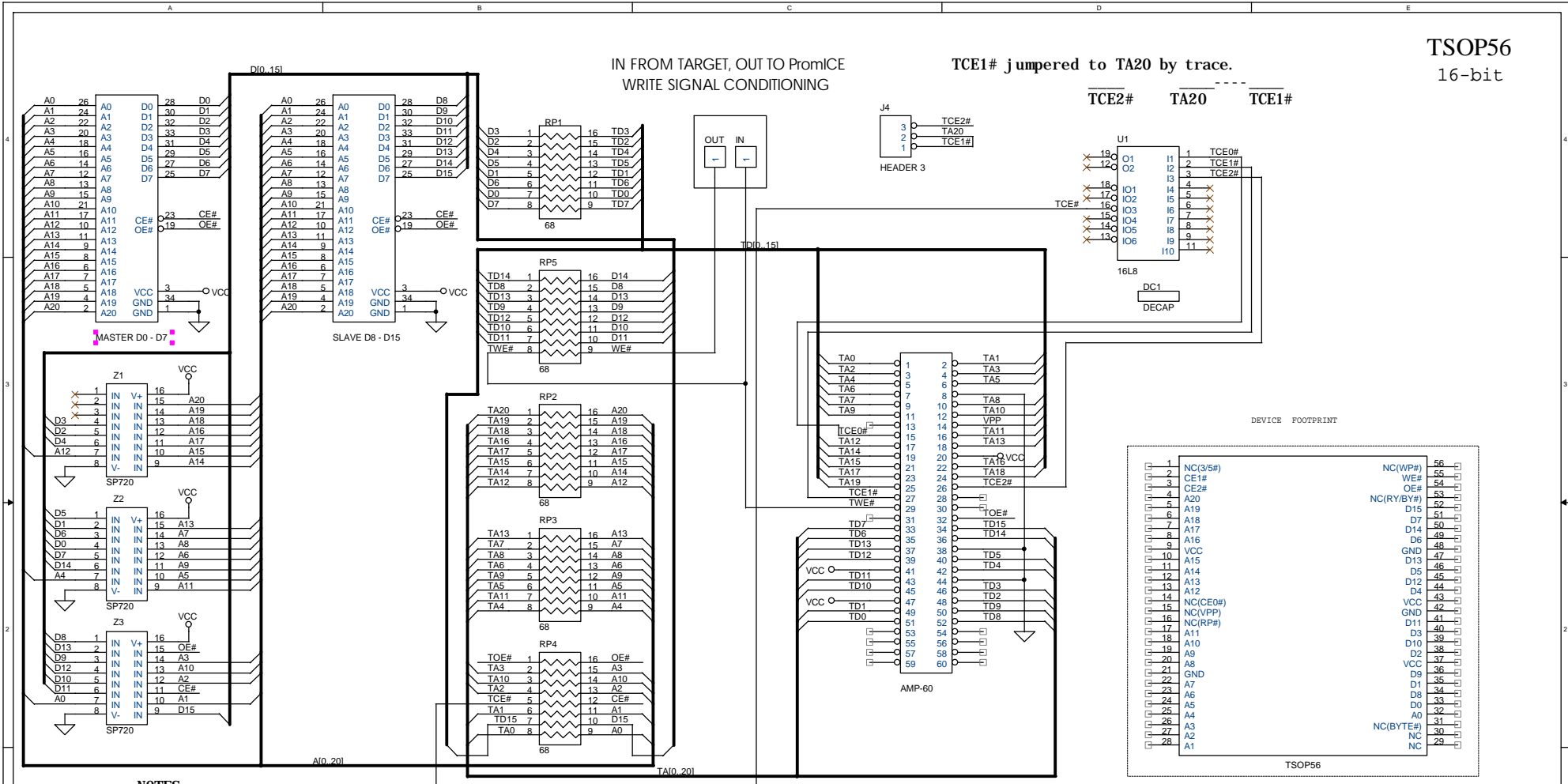
Board ID: GEI TSOP56 rev 2

Grammar Engine, Inc.		
921 Eastwind Drive		
Suite 122		
Westerville, OH 43081		
Title		
TSOP56 R2		
Size	Document Number	Rev
B	108-0016	2.0a
Date:	Friday, February 13, 1998	Sheet 1 of 1

TSOP56
16-bit

IN FROM TARGET, OUT TO PromICE
WRITE SIGNAL CONDITIONING

TCE1# jumpered to TA20 by trace.



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12	A12	45	D12
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19	A9	38	D2
20	GND	37	VCC
21	A8	36	D9
22	A7	35	D1
23	A6	34	D8
24	A5	33	D0
25	A4	32	A0
26	A3	31	NC
27	A2	30	NC(BYTE#)
28	A1	29	NC

TSOP56

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