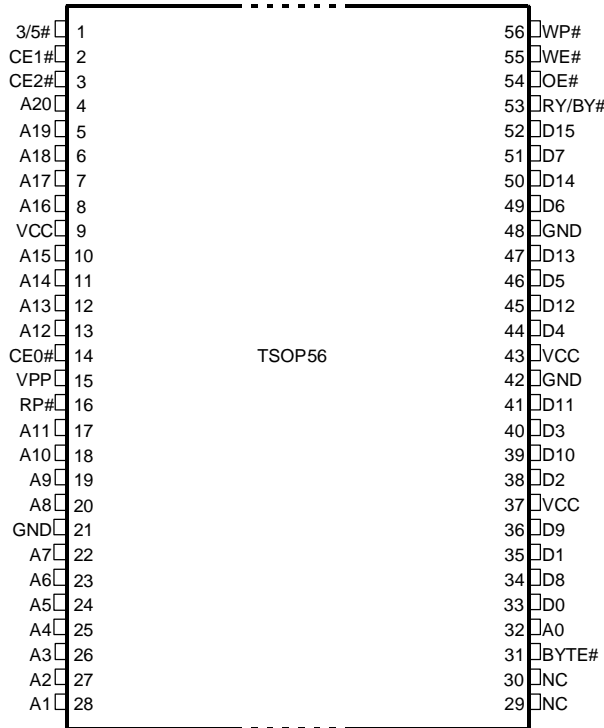




# TSOP 56-SD

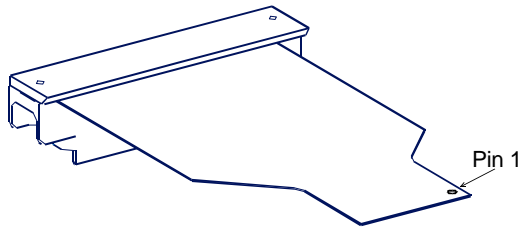
## Memory Footprint



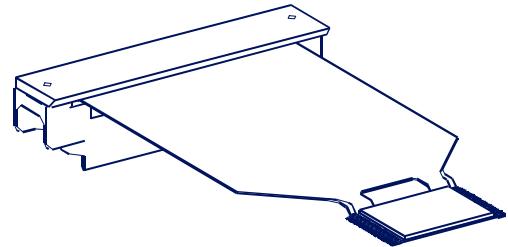
- 56 pin TSOP, 16 bit memories
- Probe solders directly to PCB
- Maximum memory size 4M Bytes
- Organized as 2M x 16 bit
- Maximum PromICE: P2160
- For **3 Volt parts**, use 3 volt adapter (GEI Part # 3VA16DC).

**Note: Maximum memory size is shown in footprint. For smaller memories, unused lines must be connected to V<sub>cc</sub> to ensure proper PromICE operation.**

## TSOP Flex Probe

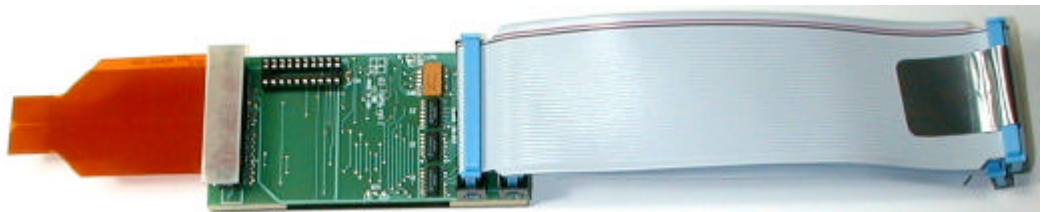


**Correct Probe** – The probe shipped with this cable is designed to be soldered directly to the PCB. Instructions for soldering are included with the probe.



**Wrong Probe** – This style of probe is intended for insertion in a Meritec socket. If you received this probe in error, do not attempt to solder it to your PCB. Contact Grammar Engine for an exchange.

## Complete Cable Assembly



## Memories Supported

- [www.promice.com/memories.htm](http://www.promice.com/memories.htm) 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.

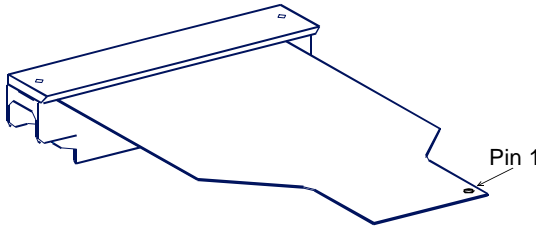
**For Technical Support, contact Grammar Engine at 614-899-7878 or [support@gei.com](mailto:support@gei.com)  
For Sales, contact Grammar Engine Inc. [www.gei.com](http://www.gei.com) or 1.800.PROMICE.**

**Notes and Precautions**

<b>Always turn target power OFF when connecting or disconnect PromICE target cables.</b>	If your target has capacitors, allow sufficient discharge time. Connecting with the power on can damage cables or the PromICE.
<b>Handle the TSOP Flex Probe with care.</b>	Carefully review the flex probe application notes (under the foam in the plastic box) before proceeding. Damage to the flex probe through mishandling is not covered in your PromICE warranty or support policy. <b>Once the seal on the case is broken, Grammar Engine Inc. cannot accept returns of flex probes.</b>

**Installation Instructions**

Step	Action	Notes
1.	<b>Verify that you have the correct cable for the memory you are emulating.</b>	If you have the wrong cable, contact Grammar Engine or your distributor for a replacement.
2.	<b>Align Flex Probe and TSOP mounting pads on the PCB.</b>	Remove the TSOP Flex Probe from its protective case. Locate pin 1 on the probe and identify the corresponding pad on your PCB



If you are unsure of the correct orientation, consult the cable schematic and the schematic of your target board.

**Important Note: The solder-down flex probe must be connected directly to the pads on your PCB. It cannot be soldered over a memory.**

3.	<b>Solder the Flex Probe to the pads on your PCB.</b>	Detailed soldering guidelines are included on the pink application notes in the flex probe box. If you need assistance, contact AlpTex at 440.437.5570. AlpTex can also provide custom connection services.
4.	<b>Connect PromICE.</b>	With the power off to your PromICE, connect the shielded ground plane cables to your PromICE.
5.	<b>Connect the adapter board to the Flex Probe.</b>	Connect the Flex Probe to the identical connector on the adapter board. (These connectors are identical but they fit together - line up the keys and slide the connector on the Flex Probe straight down onto the adapter board's connector.)

You are now ready to power up your target and PromICE. Please consult your PromICE manual for further setup information.

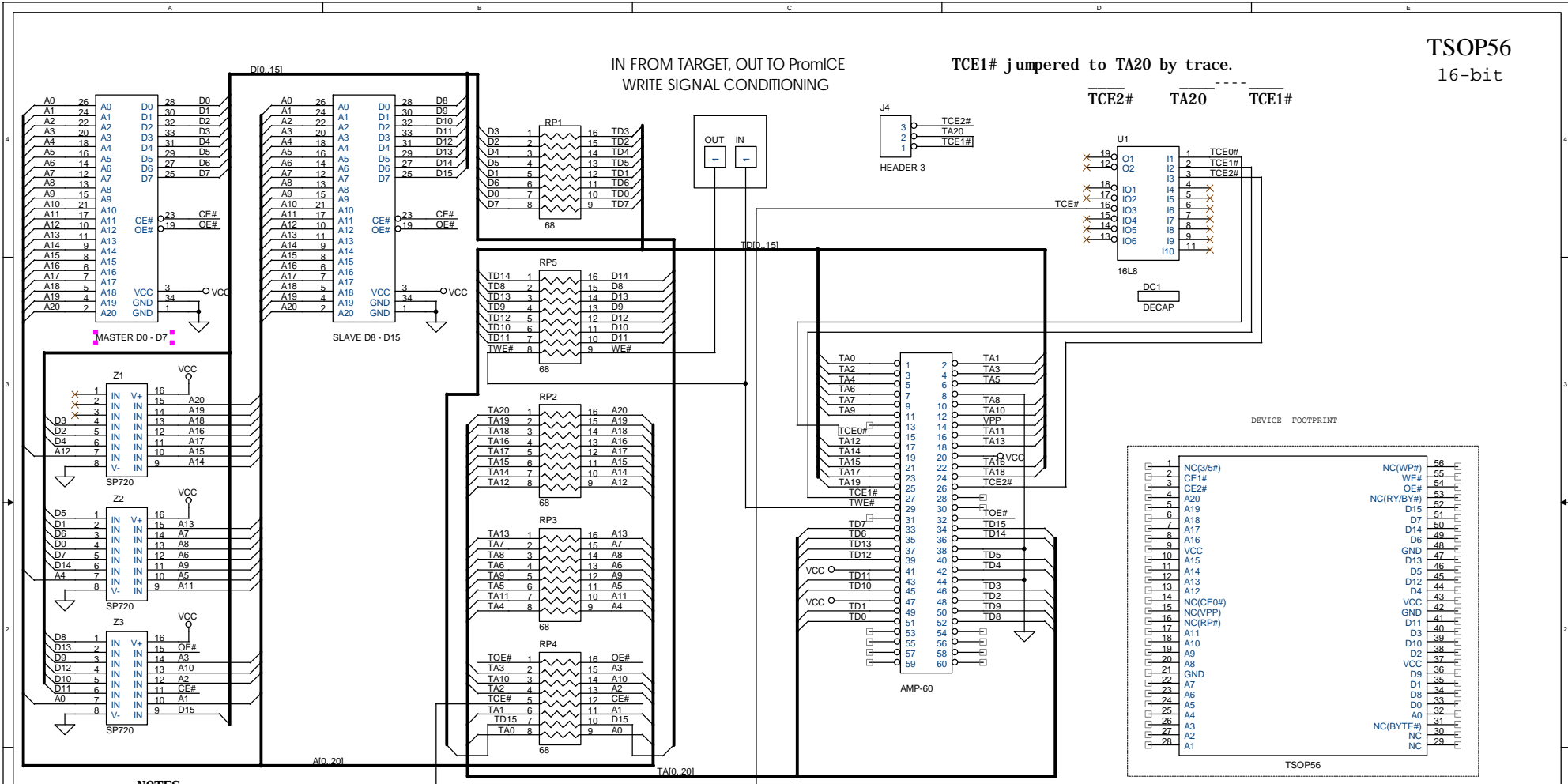
Contact your Grammar Engine Sales Representative to order these parts and accessories:

<b>Cable Parts</b>	<b>TSOP56 BD</b> <b>34FFEXT</b> <b>34FF6.7EXT</b> <b>TSOP56SDH</b>	Adapter Board 6" Shielded Ground Plane Cable 6.75" Shielded Ground Plane Cable 56 pin TSOP solder-down flex probe (AlpTex #923712-56)
	<b>PAL10</b>	PAL
<b>Accessories</b>	<b>3VA16DC</b>	3 Volt Adapter

**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	A10	39	D10
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

**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