

LA_228

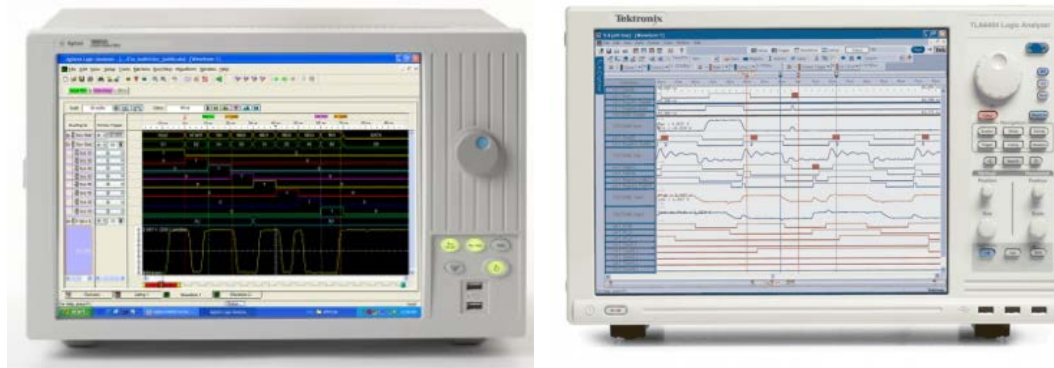
Judith Smith
Logic Analyzer Product Manager
November 2012

Two TekLA6400 Logic Analyzers are shown stacked vertically against a blue background. The top unit's screen displays a complex waveform with multiple colored traces (red, green, blue, yellow) and a digital logic diagram. The bottom unit's screen also shows a waveform. The units are dark grey with a large screen and various control buttons and knobs on the right side.

**Countering New Tek
TLA6400 Logic Analyzers**



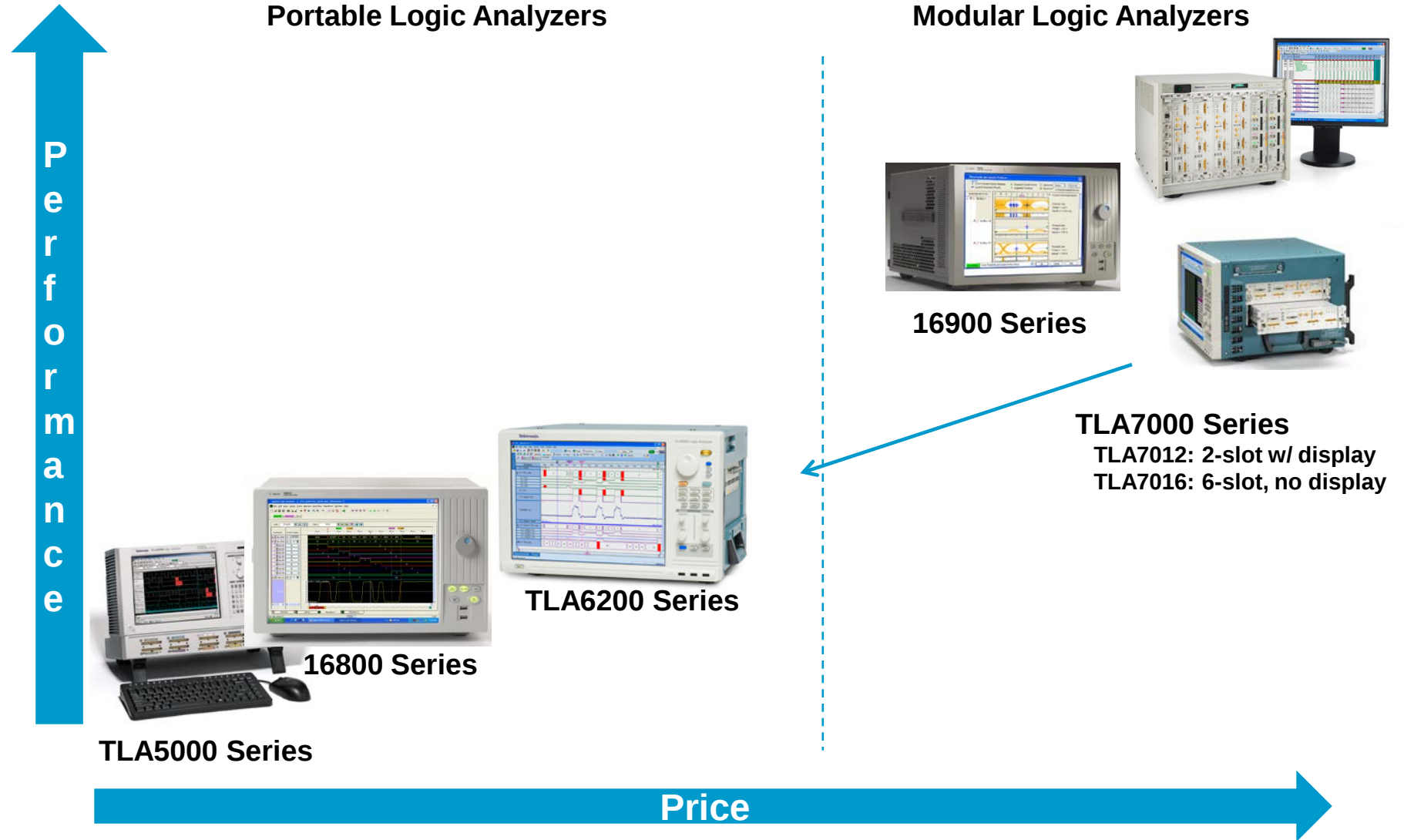
Course Objectives



The goal of this training session is to help you win competitive deals against Tek's TLA6400 by learning:

- How the new Tek logic analyzers compare vs Agilent
- What your customers will hear from Tek
- Agilent's responses and sales tactics resulting in competitive wins
- Where to find resources and contacts

Logic Analyzer Competitive Positioning – Aug 2010



Logic Analyzer Competitive Positioning – Jan 2012

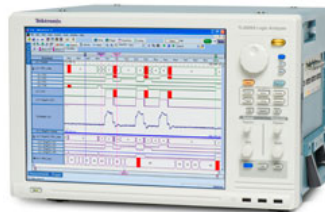
Portable Logic Analyzers

Modular Logic Analyzers

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16800 Series



TLA6200 Series



16900 Series

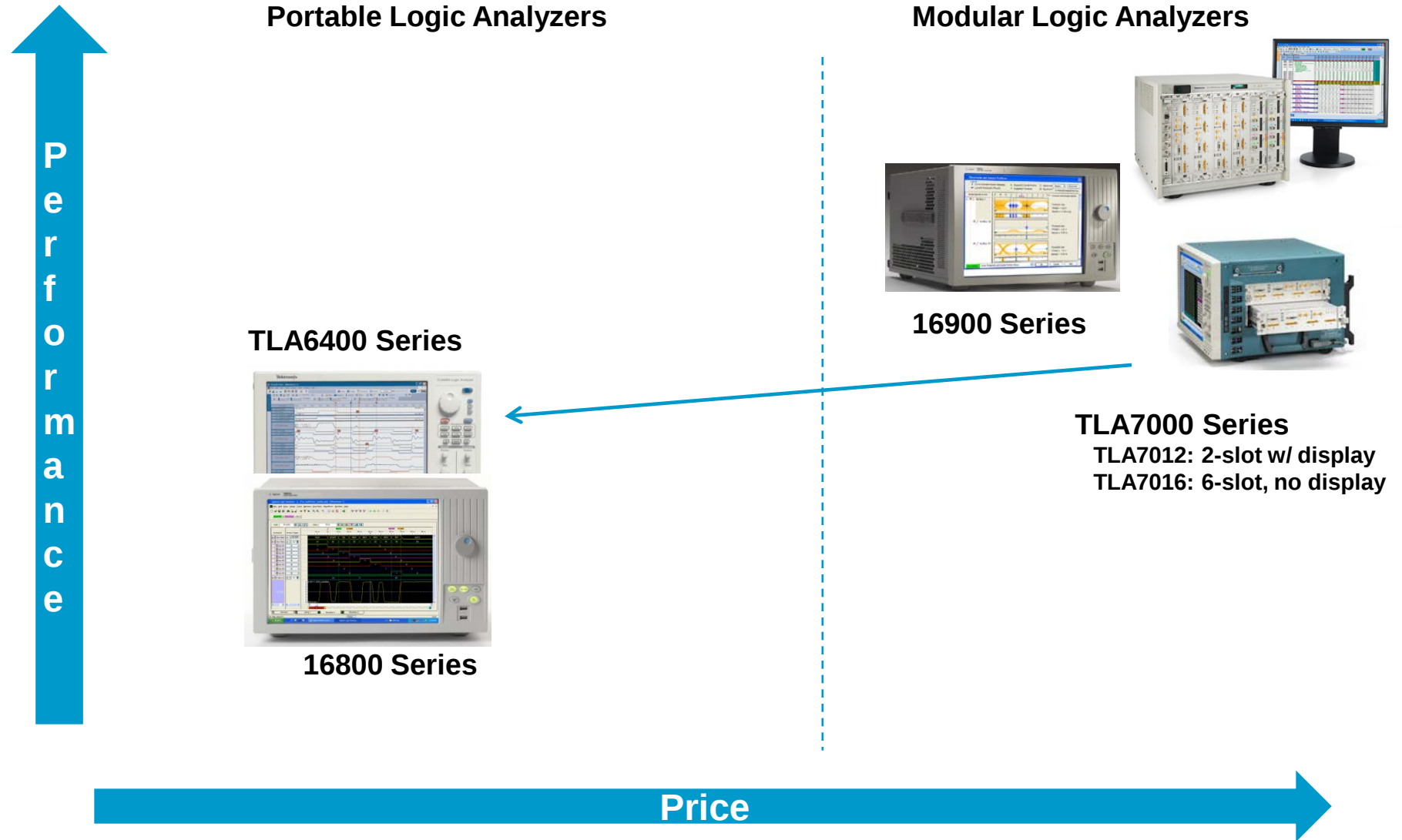


TLA7000 Series
TLA7012: 2-slot w/ display
TLA7016: 6-slot, no display

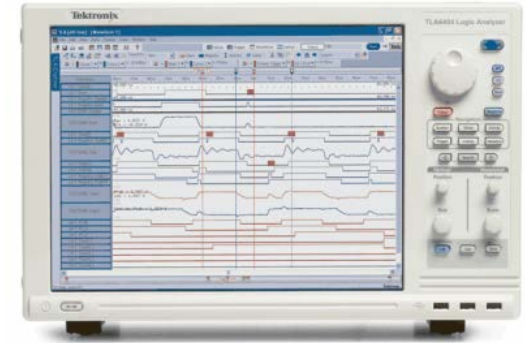
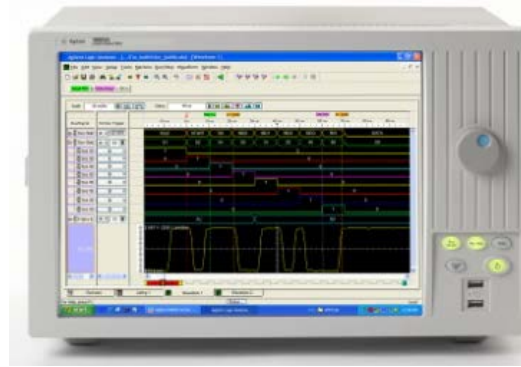
Price



Logic Analyzer Competitive Positioning – Aug 2012



Agilent 16800 Series vs Tek TLA6400



	Agilent				Tektronix			
	16801A	16802A	16803A	16804A	TLA6401	TLA6402	TLA6403	TLA6404
State Clock Rate	250 MHz 450 MHz (optional)				333 MHz (standard) 667 MHz (optional)			
Max State Data Rate	250 Mb/s 500 Mb/s (dual sample)				667 Mb/s (standard) 1333 Mb/s (optional)			
Conventional Timing	500 MHz – full channel 1.0 GHz – half channel				1.6 GHz – full channel 3.2 GHz – half channel			
High Speed Timing	4 GHz (250 ps) @ 64 K deep				25 GHz (40 ps) @ 128 Kb deep			
Memory Depth	1 M, 4 M, 16 M, 32 M (2x memory in half-ch timing)				2 M, 4 M, 8 M, 16 M, 32 M, 64 M (2x memory in half-ch timing)			
Signal Support	Single-ended				Single-ended			
Channels	34	68	102	136	34	68	102	136
Independent analyzers	1	2			1			

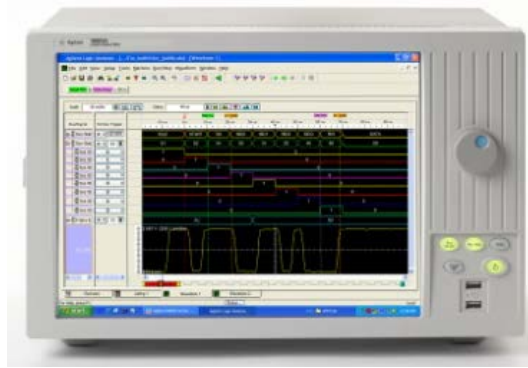
Competitive Situation

In the portable logic analyzer market space...

- In the past many sales were repeat buys where customer called for quote/order from current vendor
- Customers doing more upfront research on the web
- Budget constraints drive customers to get the most for their purchase → long range investment protection
- Both Tek and Agilent have differentiators

Agilent needs to be proactive → engage customers before Tek

Agilent 16800 Series vs Tek TLA6400 Series Portable Logic Analyzers



Agilent's Differentiators

- Free 4 M base memory through Promotion 5.906
- Best in class FPGA debug
- ONLY integrated pattern generator
- ONLY portable logic analyzer with 2 independent analyzers
- ONLY 204-channel portable logic analyzer



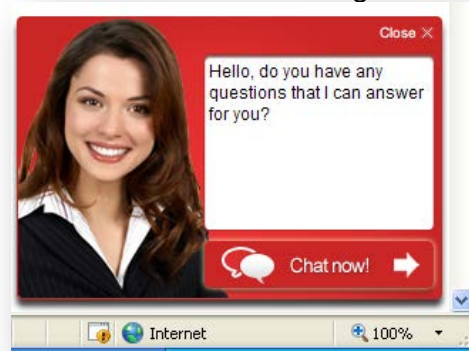
Tek's Differentiators

- Higher timing speeds
- Higher state speeds
- 2x max memory depth
- 2% less in price (base and options)

Tek Tactics → Agilent Response and Sales Tactics

Tek's Tactics

- Engage customers doing web research with interactive chat dialog



Agilent's Response and Sales Tactics

- Engage with & protect your logic analyzer installed base by sending out FE Newsletter to your customers to tell them about FREE 4 M memory upgrade promotion for 16800 series logic analyzers



www.agilent.com/find/16800_promo



Gain deeper insight!

FREE 4 M Memory Upgrade with the Purchase of a 16800 Series Logic Analyzer

Start date: October 1, 2012
End date: March 31, 2013
Promotion code: 5.906



For a limited time, purchase a 16800 series portable logic analyzer and receive a free 4 M memory upgrade option.

Gain better insight into a digital system's behavior using deeper acquisition memory. With 4 M of memory, accelerate validation and debug of prototypes by capturing a longer period of target activity. Quickly find elusive cause and effect problems that are separated in time.

Eligible portable logic analyzers	Eligible 4 M memory upgrade options
All 16800 series:	4 M memory upgrade options for all 16800 series portable logic analyzers:
16801A, 16802A, 16803A, 16804A	16801A-004, 16802A-004, 16803A-004, 16804A-004
16806A, 16821A, 16822A, 16823A	16806A-004, 16821A-004, 16822A-004, 16823A-004



Tek Tactics → Agilent Response and Sales Tactics

Tek's Tactics

- Once engaged with customers Tek will push specification leadership and aggressive discounting



Key Specs Comparison

Feature	Tek TLA6400	AT 16800A (16910A/11A + 16720A)
LA channels	34, 68, 102, 136	34, 68, 102, 136, 204
Analog mux	Yes	No
High-speed timing	MagniVu 25 GS/s (40 ps) 128 Kb	Timing Zoom 4 GS/s (250 ps) 64 Kb
Deep timing	3.2 GS/s (1/2ch) 1.6 GS/s (all ch) <i>No tradeoffs in speed or record length with transitional timing or storage</i>	1 GS/s (1/2 ch) 500 MS/s (all ch) <i>Transitional speed and record length halved unless spare 34 channel is available</i>
State clock/data	333 MHz / 667 Mbs-all (std) Min: 667 MHz / 1333 Mbs-all (opt)	250 MHz / 250 Mbs (std) 450 MHz / 500 Mbs (opt)
Data valid window	< 800 ps Single channel 20 ps sample adjustment, +16/-8 ns range	1.5 ns Single channel 80 ps sample adjustment, +3.2/-3.2 ns range
Record length	2 Mb (std), 4 Mb (opt), 8 Mb (opt), 16 Mb (opt), 32 Mb (opt), 64 Mb (opt)	1 Mb (std), 4 Mb (opt), 16 Mb (opt), 32 Mb (opt)

Agilent's Response and Sales Tactics

- Understand the customer's application. Agilent has superior solutions for...**
 - DDR Memory
 - FPGA (Xilinx and Altera)
 - IQ modulation
 - Differential signals → requires modular system
- Lead with Agilent's differentiators**
 - Best in class FPGA debug
 - Models with built-in pattern generator
 - 2 independent analyzers
 - 204 channel model
 - Ease of use
- Counter Tek specs and discounting with Free 4 M memory upgrade promotion**
- Contact BDM for additional deal considerations**



Agilent's Differentiators - Customer Viewable Table

	Agilent 16800 Series					Tek TLA6400 Series			
Logic Analyzer	16801A	16802A	16803A	16804A	16806A	TLA6401	TLA6402	TLA6403	TLA6404
Logic Analyzer with Built-in Pattern Generator	16821A	16822A	16823A			N/A			
Logic Analyzer Channels	34	68	102	136	204	34	68	102	136
Pattern Generator Channels	48	48	48			N/A			
State Clock Rate	250 MHz 450 MHz (optional)					333 MHz (standard) 667 MHz (optional)			
Max State Data Rate	250 Mb/s 500 Mb/s (dual sample)					667 Mb/s (standard) 1333 Mb/s (optional)			
Conventional Timing	500 MHz – full channel 1.0 GHz – half channel					1.6 GHz – full channel 3.2 GHz – half channel			
High Speed Timing	4 GHz (250 ps) @ 64 K deep					25 GHz (40 ps) @ 128 Kb deep			
Memory Depth	1 M, 4 M, 16 M, 32 M (2x memory in half-ch timing)					2 M, 4 M, 8 M, 16 M, 32 M, 64 M (2x memory in half-ch timing)			
FPGA	Integrated application, Automated bit mapping					Separate application, complex use model			
Eye Scan	Yes					N/A			
Integrate time-correlated scope waveforms	View Scope (standard) Automatic signal scaling and correlated tracing markers					iView (feature standard, cable cost \$206 for USB, \$2,180 for GPIB))			
Analog Signal Support	N/A					4 fixed channels to iCapture Analog Output BNCs (standard) Route any 4 channels to Analog Output BNCs (optional)			
Signal Support	Single-ended					Single-ended			
Independent analyzers	2 (except 34-channel models)					1			

Countering Tek's 25 GHz MagniVu

Tek's Tactics

- Push 25 GHz MagniVu (high-speed timing)

Tektronix Logic Analyzers

TLA6400 Series Datasheet



Features & Benefits

- Performance and Ease of Use to Debug, Validate, and Optimize Digital Systems
 - 40 ps Resolution MagniVu™ Acquisition to Accurately See Signal Relationships in Your System
 - State Speed – Sample your fastest synchronous buses with clock rates up to 667 MHz and data rates up to 1333 Mb/s

Agilent's Response and Sales Tactics

- Focus on the amount of time the customer needs to see with high-speed timing.



Agilent: 250 ps sampling (4 GHz)
64K memory depth
Covers 16 micro seconds



Tek: 40 ps sampling (25 GHz)
128K memory depth
Covers ~5 micro seconds

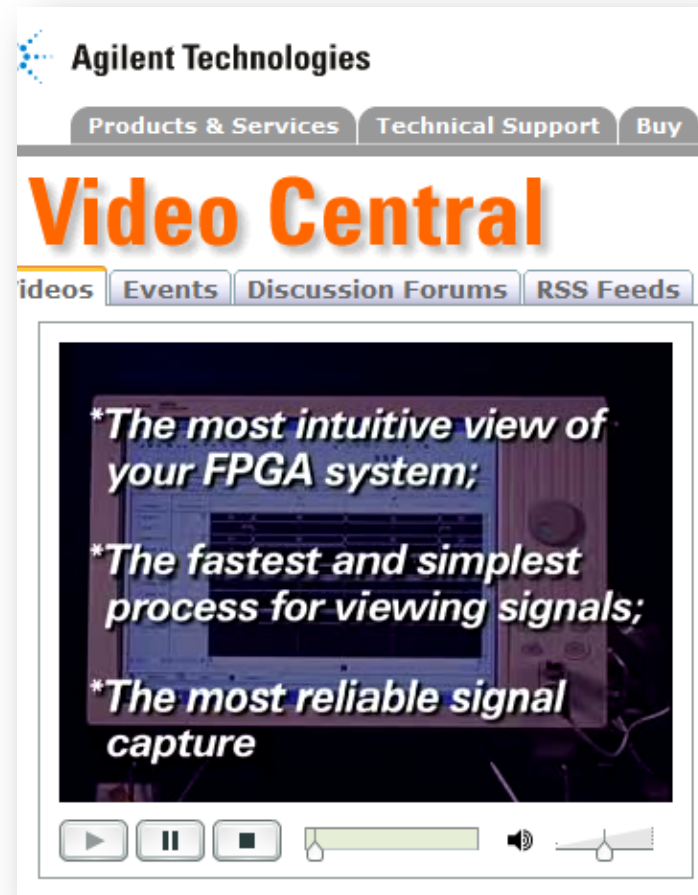
Countering Specifications with Applications

Tek's Tactics

- Push specifications

Agilent's Response and Sales Tactics

- Promote Agilent's superior applications support
- Have customer viewable side-by-side competitive video



Competitive Summary



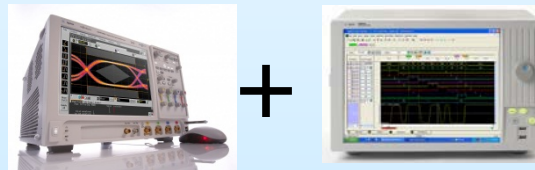
Tek TLA6400 does pose a competitive threat

Agilent needs to aggressively defend LA market share

When we're proactive we can win and here's how:

1. Use FREE 4 M memory upgrade promotion
2. Lead with differentiating features & application support
3. Combine LA in deals with other Agilent equipment (e.g. LA with Scope or AWG)

4. Discounting



5. Special offers through division: free options or application software

Gain deeper insight!
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Start date: October 1, 2012
End date: March 31, 2013
Promotion code: 9.906

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16806A, 16821A, 16822A, 16823A	16806A-004, 16821A-004, 16822A-004, 16823A-004

SPECIAL OFFER!

Competitive Summary



Using the competitive responses and sales tactics we've shown, we've won head-to-head deals against the TLA6400



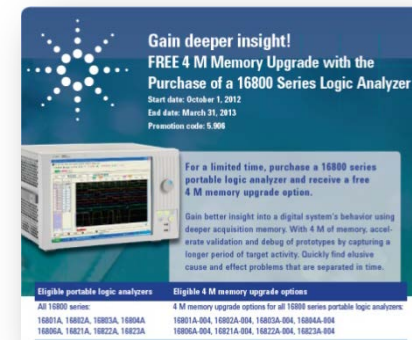
Logic Analyzer Resources

Sales Tools/ Resources for Logic Analyzers

- www.agilent.com/find/logic
- 4 M Memory promotion: www.agilent.com/find/16800_promo

Contacts

- Regional Sales BDMs
 - US: Daniel Bogdanoff 
 - Japan: Katsuyoshi Horibe 
 - KSAP: Vimal Ranganathan 
 - GCH/Korea: Chee Lam Chan and Teng Huang 
 - EMEA: Yoram Shimoni 
- Product Marketing: Judith Smith (judith_smith@agilent.com) 



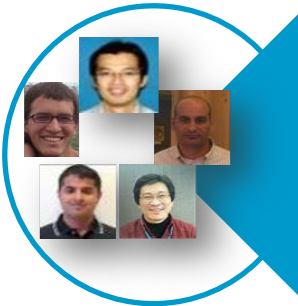
Call to Action



Use tools to proactively
defend your installed
base/Agilent market share



Lead with Agilent
differentiators and use the
4 M promotion



Contact your BDM for
assistance on every deal