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Auto Memory  
Compression for  
Maximum Sampling  
**DigiView**

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## DigiView™ Specifications

### Additional DigiView Specs:

|                    | DV1-100                                                                                                   | DV3400                                                                                                             |
|--------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Power Source       | USB                                                                                                       | External                                                                                                           |
| Idle power         | < .5 Watt                                                                                                 | 2.5 Watt                                                                                                           |
| Active Power       | < 2.5W                                                                                                    | < 7 Watt                                                                                                           |
| Sample Rate        | 100 MHz(10ns)                                                                                             | 200 Mhz(5ns)<br>400 MHz(2.5ns)                                                                                     |
| Channels           | 18                                                                                                        | 18 or 36                                                                                                           |
| Sample Count       | Varies with data due to real-time compression                                                             | Varies with data due to real-time compression                                                                      |
| Samples @ 100 Mhz  | <b>Min:</b> 128K (x18) @ 10ns = 1.3 ms<br><b>Max:</b> 2 <sup>^</sup> 35 (34 Billion) @ 10ns = 5.7 minutes | N/A                                                                                                                |
| Samples @ 200 Mhz  | N/A                                                                                                       | <b>Min:</b> 512K (x36) @ 5ns = 2.6 ms<br><b>Max:</b> 2 <sup>^</sup> 52 (4.5 x 10 <sup>^</sup> 15) @ 5ns = 26 Days  |
| Samples @ 400 Mhz  | N/A                                                                                                       | <b>Min:</b> 1M (x18) @ 2.5ns = 2.6 ms<br><b>Max:</b> 2 <sup>^</sup> 53 (9 x 10 <sup>^</sup> 15) @ 2.5ns = 260 Days |
| Raw Memory         | 4.5 Mbit                                                                                                  | 18 Mbit                                                                                                            |
| Trigger position   | Auto or 50%                                                                                               | Selectable (0-100%)                                                                                                |
| Trigger Sequencers | 0                                                                                                         | Configurable:<br>1@16 stages<br>OR 4@4 stages<br>OR 2@8 stages<br>OR 1@8 and 2@4 stages<br>OR 1@12 and 1@4         |

|                                                       |                                                                                       |                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                       |                                                                                       | stages                                                                                                                                                                                                                                                                                           |
|                                                       |                                                                                       | 8 Universal:<br>Each can be configured as:<br>- Edge Detect (36 bit OR: rising, falling, either)<br>- Patterns (36 bit AND: 0, 1, X)<br>- Stable (36 bit)<br>- > (36 bit RANGE)<br>- >= (36 bit RANGE)<br>- < (36 bit RANGE)<br>- <= (36 bit RANGE)<br>- = (36 bit RANGE)<br>- <> (36 bit RANGE) |
| Trigger Match Circuits                                | 1 Pattern (18 bit AND: 1, 0, X)<br>1 Edge detect (18 bit OR: rising, falling, either) |                                                                                                                                                                                                                                                                                                  |
| Match Duration                                        | No                                                                                    | Yes<br>- 1 per match circuit<br>- up to 1M samples each                                                                                                                                                                                                                                          |
| Trigger Pass Count                                    | No                                                                                    | Yes (up to 1 Million per Sequencer stage)                                                                                                                                                                                                                                                        |
| Trigger Output Sources                                | Edge detect<br>OR Pattern detect<br>OR (Edge detect AND Pattern detect)               | Seq 1<br>OR Seq 2<br>OR Seq 3<br>OR Seq4<br>OR (8 input sum-of-input products of all 8 match circuits)                                                                                                                                                                                           |
| External Trigger Output                               | No                                                                                    | Yes, BNC connector                                                                                                                                                                                                                                                                               |
| Threshold Circuits                                    | 1                                                                                     | 2 (1 for for each group of 18 channels)                                                                                                                                                                                                                                                          |
| Threshold Range                                       | fixed at 1.6V                                                                         | Adjustable (-6V to +6V)                                                                                                                                                                                                                                                                          |
| Threshold Accuracy                                    | + - 100mv                                                                             | + - 250mv                                                                                                                                                                                                                                                                                        |
| Maximum voltage (Continuous, all channels)            | +10/-5V                                                                               | + -50 Volts                                                                                                                                                                                                                                                                                      |
| Impedance                                             | >100KOhm series, <10pf to ground (0-5V)<br>>1KOhm series, <10pf to ground (<0, >5V)   | 50KOhms, < 3pf                                                                                                                                                                                                                                                                                   |
| Anti-static protection                                | Yes                                                                                   | Yes                                                                                                                                                                                                                                                                                              |
| Ground current Protection (ground lead to +- voltage) | No                                                                                    | Yes, +-12 Volts                                                                                                                                                                                                                                                                                  |
| Size (LxWxH)                                          | 4.1" x 2.6" x .9"                                                                     | 5.0" x 4.25" x 1.40"                                                                                                                                                                                                                                                                             |

## Data Cable Specs:

|                   | DV1-100                                                                                 | DV3400                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Length            | 12"                                                                                     | 12"                                                                                              |
| Wire              | Hi-strand count (> 60), very flexible, color coded.                                     | Hi-strand count (> 60), very flexible, color coded.                                              |
| Connectorized     | yes, both ends.                                                                         | yes, both ends.                                                                                  |
| DigiView end      | 2x10, hi quality AMP.                                                                   | (2) 2x10, hi quality AMP.                                                                        |
| Data end          | 1x1, hi quality AMP. Side stackable on .1" centers. Fits .025 Sq posts and micro-clips. | 1x1, True Square. In-line and Side stackable on .1" centers. Fits .025 Sq posts and micro-clips. |
| Field replaceable | YES                                                                                     | YES                                                                                              |
| MicroClips        | 20, suitable for grabbing SM as well as DIP pins.                                       | 40, suitable for grabbing SM as well as DIP pins.                                                |

## Additional Software Specs:

|                                   |                                              |
|-----------------------------------|----------------------------------------------|
| Zoom                              | 10ns/div to 50 Sec/div (IN, OUT and marquee) |
| Language                          | English                                      |
| Split Waveform Views              | yes                                          |
| Waveform Views Zoom Independently | yes                                          |
| Time Sync (Link) Waveform Views   | yes - selectable                             |
| Waveform print                    | yes                                          |
| Add comments to Waveform print    | yes                                          |
| Waveform Save as Image            | yes - JPEG format                            |
| Add comments to Waveform image    | yes                                          |
| Waveform save/restore             | yes                                          |
| Project save/restore              | yes (with waveforms)                         |

|                                     |                                                                           |
|-------------------------------------|---------------------------------------------------------------------------|
| Auto save/restore                   | yes                                                                       |
| Search Function                     | yes                                                                       |
| Forward and Reverse Searching       | yes                                                                       |
| Multi-Signal Pattern Search         | yes                                                                       |
| Search Pattern "Don't Care" support | yes, bit and nibble exclusions                                            |
| Search Match Duration               | yes                                                                       |
| Search Animate                      | yes (Auto Repeat)                                                         |
| Selectable Search Marker            | yes - A, B, C, D, X, Y                                                    |
| Define Multiple Searches            | yes                                                                       |
| Data Sequence Searches              | yes, for specialized, decoded signals(i.e. SPI, RS-232, State Mode, etc.) |
| Signal order                        | drag-n-drop, independent to each view                                     |
| Signal Buses                        | yes                                                                       |
| Show Bus as Analog                  | yes, Special Analog Signal type                                           |
| Expand/Collapse Bus Channels        | yes, using icon by each waveform label or popup menu in Data Table views. |
| Swap order of Expanded Channels     | yes, popup menu selectable                                                |
| Signal labels                       | yes                                                                       |
| Show inverted signals               | yes                                                                       |
| Select Signal Color                 | yes                                                                       |
| Signal "Next Edge" scrolling        | yes - previous, next                                                      |
| Signal "Next Edge" Animate          | yes (Auto Repeat)                                                         |
| On-line Help                        | yes                                                                       |
| Markers                             | Trigger, A, B, C, D, X, Y                                                 |
| Marker SNAP                         | Left, Right, NEAREST edge, Searches                                       |
| Marker Snap Animate                 | yes (Auto Repeat) - X, Y, Searches                                        |
| Marker TACK                         | yes - X and Y                                                             |
| Marker Drag & Drop                  | yes                                                                       |
| Marker Drag & Drop                  | yes                                                                       |

|                                          |                                                           |
|------------------------------------------|-----------------------------------------------------------|
| marker Drag & Snap                       | yes                                                       |
| Auto Scroll when Dragging Markers        | yes                                                       |
| Time Measurements                        | Marker positions, Marker difference                       |
| Data Table Views                         | yes                                                       |
| Multi-Signal Tables                      | yes                                                       |
| Table Zoom                               | yes                                                       |
| Table "Transistion Compression"          | yes                                                       |
| Table Data Format                        | Binary, HEX, Decimal - per signal                         |
| Table Time Sync (Linking)                | yes - Selectable by Link Group or no link                 |
| Table Time by Delta                      | yes - Absolute, Delta selectable                          |
| Table Time Units                         | Auto, ns, us, ms, Sec.                                    |
| List Views                               | yes, for specialized, decoded signals(i.e. I2C, SPI etc.) |
| Export Data                              | yes, ASCII CSV format - configurable                      |
| Export Compression                       | yes, Selectable                                           |
| Export Range                             | yes, Custom or preset Time selectable                     |
| Export From List View                    | yes                                                       |
| Subwindows can "Tab" together            | yes, drag & drop                                          |
| Tabbed windows can merge                 | yes, drag & drop                                          |
| Selectable Tab position                  | yes - Top, Left, Right, Bottom of Tabbed Window           |
| Subwindows can "Dock" to main window     | yes - Top, Left, Right, Bottom of WaveForm Views          |
| Tabbed windows can "Dock" to main window | yes - Top, Left, Right, Bottom of WaveForm Views          |

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