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AVT-716 - Trigger Function

AVT-716 Firmware revision 4.1 and above has a hardware trigger function implemented. The trigger function is only available in VPW mode and only for one set of mask and match bytes.

If enabled, the trigger function performs as follows:

- The number of mask and match bytes must be the same.
- If the message is shorter than the number of mask/match bytes, then the test automatically fails.
- Each byte of the message is first masked by the corresponding mask byte (a logical "AND" operation).
- The result is compared to the match byte. If they are not equal, the test fails. If they are equal the test proceeds.
- If all individual byte tests pass, the output port is driven to a logic high. (CMOS output, +5v.)
- The output is on AVT-716 board 1. The output is not buffered.
[Rev. D: P4 pin #1, ground is pin #3] [Rev. E: P4 pin #3, ground is pin #2]
- The trigger is driven high approximately 330 microseconds after receipt of EOD on the bus.

The commands and responses to utilize this function are listed on the next page.

AVT-716 Trigger Function (VPW mode only)

Commands and Responses

Trigger function Command

51 41:	Status request.
52 41 00:	Function disabled.
52 41 01:	Function enabled.

Response

62 41 00:	Function disabled.
62 41 01:	Function enabled.

Mask bytes Command

51 42:	Report mask bytes.
5x 42 xx yy ... :	Enter mask bytes, maximum of 6 bytes.

Response

6x 42 xx yy ... :	Mask bytes.
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Match bytes Command

51 43:	Report match bytes.
5x 43 xx yy ... :	Enter match bytes, maximum of 6 bytes.

Response

6x 43 xx yy ... :	Match bytes.
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Trigger function Status/Reset Command

51 44:	Report status.
52 44 00:	Reset trigger output.
52 44 01:	Set trigger output.

Response

62 44 00:	Trigger output is low.
62 44 01:	Trigger output is high.