

Multi-level Trigger – Solving the sharp problem in Serial Signal

702000R

High Speed / Long depth / Multichannel Measurement All by One Set



Multi-level trigger is composed by many single-level triggers. More trigger levels could make the trigger condition more strict, which means more event conditional status could be set to capture particular signal.



Powerful Hardware Function: 256-level Trigger

LAP-B (702000R) has 256 levels “multi-level trigger”, each level could be set as high/low, rising/falling edge and pulse width to trigger.

256 - level trigger is powerful to capture most signal problems. It would do a great help for project researching and developing, product debugging or even processing on the production line.

Channel Trigger Setup

Trigger Group0 | Trigger Group1 | External Trigger(Click)

Internal Trigger Enable

	7	6	5	4	3	2	1	0
Filter Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trigger Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	15	14	13	12	11	10	9	8
Filter Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trigger Condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Port A | Port D

Activate Enable Space Time Value(Min) 40ns Space Time Value(Max) 21.474836475s

Wait Enable Width Time Value(Min) 40ns Width Time Value(Max) 21.474836475s

Wait space end point Wait width end point

Pre-Fill Data

All Level Active

All Level None Active

Trigger Count | 1

OK Cancel Default Help

256-level trigger

pulse width trigger



Serial Bus Hardware Trigger – Real-time Capture Serial Signal Packet

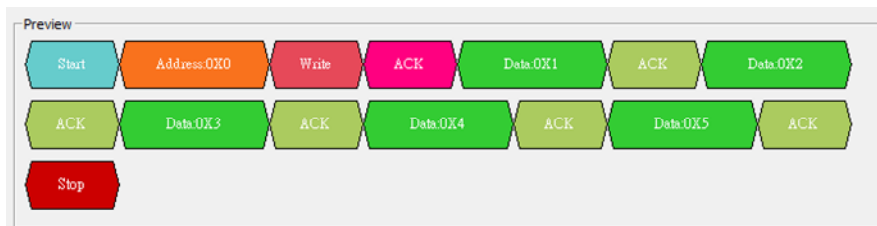
In fact, the multi-level trigger of LAP-B (702000R) could apply to many aspects, and the serial bus hardware trigger is a good example.

Serial bus hardware trigger could judge whether the bus packet content satisfies the trigger condition or not, then capture particular serial signal packets instantly and accurately. It also has an easy-to-operate graphic interface. Until now only I2C, SPI, UART, CAN BUS and SVID support this function, more buses will support it in the future.



Example:

Set I2C to trigger with
Address=0x00, Write and
Data=01/02/03/04/05.



※Want to know more detailed specification? [<click here>](#) ※