#### Soontech Annals

# LC03: Await Latch

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Tags: logic-and-computation

#### **Features**

- 2 Wide and 2 High
- "Unbreakable"

# **Applications**

• Queueing tasks

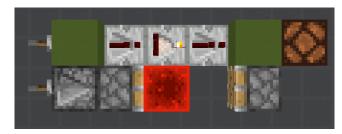


Figure 1: Await Latch

### **General Description**

The LC03 Await Latch takes one pulse input and one boolean input. Pulse only goes through when boolean input is on. If it is off, it will wait until boolean input turns on and then send pulse. Won't break with random inputs.

# **Device Specifications**

#### Table 1: Inputs

Name	Range	Description			
Pulse input	pulse	Pulsed signal to transport.			
Ready input	0-1	Delays pulsed signal until ready.			

#### Table 2: Outputs

Name	Range	Description
Output	Pulse	Output pulse

#### Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	12	-	-	gt	Normal Usage
Latency	4	-	-	gt	From input to output
MC Version	1.13	1.17.1	-	MCV	Latest version at time of writing: 1.19.3
Dimensions		2 x 2 x 7		Blocks	

# **Testing Data**

Table 4: Executed Tests

Test	Result		
Spam test	Device didn't break with spammed inputs.		
Throughput test	Device was able to pulse signals successfully at 12gt throughput.		

# **Download Information**

Table 5: Download Information

Identifier	MC	File	Description
LC03	1.17.1	$LC03\_await\_latch.lite matic$	Schematic of device.