

TP02: Pipelined Encoded Variable Waterstream

By: Andrews54757

Tags: transport, binary-encoded

Features

- $O(n)$ insertion time with 10BPS waterstream.
- 16gt throughput
- Pipelined for parallelization.

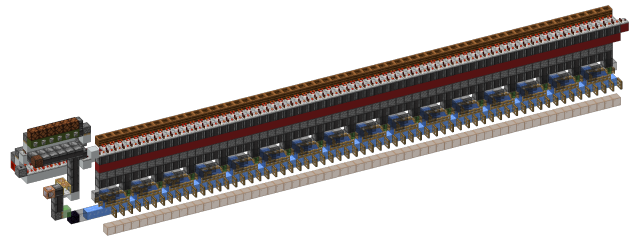


Figure 1: Pipelined Encoded Variable Waterstream

Applications

- Item transport for halls.

General Description

Takes a 6 bit binary code and deposits items in the decoded slice in linear time $O(n)$. Pipeline-able for massively parallelized chest halls. Uses overstacked comparators with a 10bps waterstream to keep item entity and code in sync. Can execute an operation every 16gt.

Device Specifications

Table 1: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	16	-	-	gt	Normal Usage
MC Version	1.16	1.17.1	-	MCV	Latest version at time of writing: 1.19.3
Dimensions	6 x 15 x 76			Blocks	

Testing Data

Table 2: Executed Tests

Test	Result
Throughput test	Device was able to function with 16gt clocked input.

Download Information

Table 3: Download Information

Identifier	MC	File	Description
TP02	1.17.1	TP02_Pipelined_Encoded_Variable_Waterstream.litematic	Schematic of device.