

IM02: 1000 Item RAM

By: Andrews54757

Tags: item-memory, random-access

Features

- Has 1000 different codes/item types. a dropper of storage per code.
- Random access. Can insert and retrieve items in constant time in any order.
- Half hopperspeed order throughput. Can execute insertions and retrievals every 16 game ticks (exclusive, can't do both at same time).
- Hopperlocked. Is fully hopperlocked.
- Togglestateless. No piston toggle states.

Applications

- Temp storage for merging.
- Dynamic bulk mapping storage.

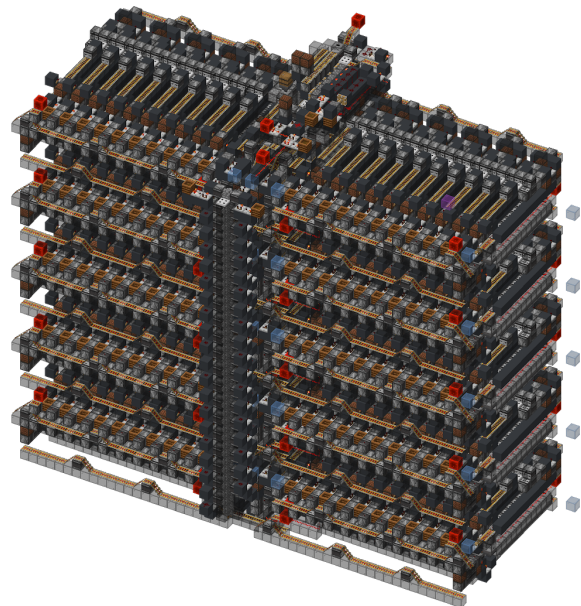


Figure 1: 1000 Item RAM

General Description

The IM02 is able to store and retrieve items with a specific decimal code. This may be useful as a temp storage in an encoded dynamic sorting system.

Device Specifications

Table 1: Inputs

| Name | Range | Description |
|-------------------|-------|---|
| Code Digit 1 | 1-10 | First digit indicating leaf. |
| Code Digit 2 | 1-10 | Second digit indicating row. |
| Code Digit 3 | 1-10 | Third digit indicating column. |
| Execute insertion | Pulse | Executes insertion with the given settings. |
| Execute retrieval | Pulse | Executes retrieval with the given settings. |
| Item Input | Item | Item to be inserted/retrieved. |

Table 2: Outputs

| Name | Range | Description |
|-------------|-------|------------------------------|
| Item Output | Item | Output for retrieval orders. |

Table 3: Device Specifications

| Parameter | Min. | Typ. | Max. | Unit | Conditions |
|--------------------------|------|--------------|------|---------|---|
| Order Execution Interval | 16 | - | - | gt | Normal Usage |
| Hopper Count | | 1111 | | Hoppers | |
| MC Version | 1.13 | 1.17.1 | - | MCV | Latest version at time of writing: 1.19.3 |
| Dimensions | | 53 x 55 x 28 | | Blocks | |

Testing Data

Table 4: Executed Tests

| Test | Result |
|-----------|---|
| Insertion | Items were successfully inserted in all positions. |
| Retrieval | Items were successfully retrieved from all positions. |

Download Information

Table 5: Download Information

| Identifier | MC | File | Description |
|------------|--------|---|-------------------------------|
| IM02 | 1.17.1 | IM02_1000_item_RAM_p2.litematic | Litematic of item RAM device. |