

IM04: Compact 1000 Item RAM

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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.
- Compact. Each address is packed into a 1x1 area.
- 46gt latency from call request to item.
- Fully hopperlocked.

Applications

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

General Description

The IM04 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.

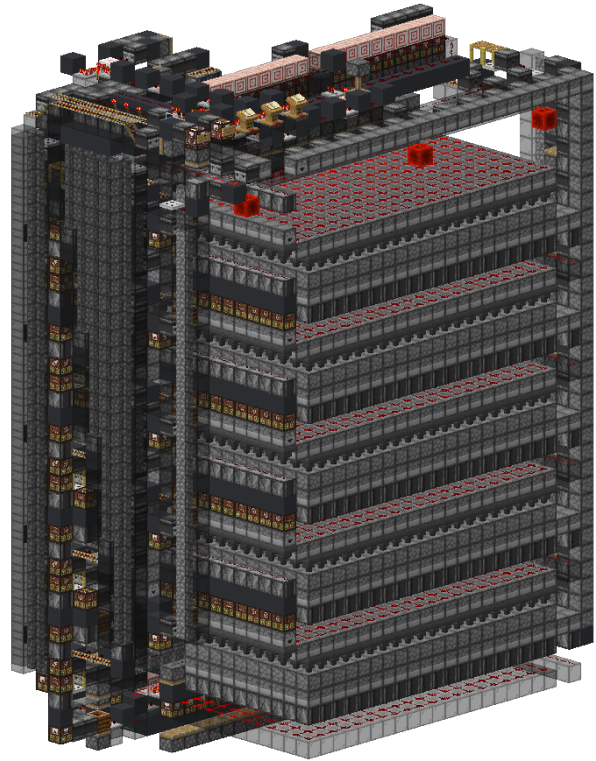


Figure 1: Compact 1000 Item RAM

Device Specifications

Table 1: Inputs

| Name | Range | Description |
|-------------------|-------|---|
| Code Digit 1 | 1-10 | First digit indicating level and side. |
| 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 | 32 | - | - | gt | Normal Usage |
| Hopper Count | | 1055 | | Hoppers | |
| MC Version | 1.13 | 1.19.3 | - | MCV | Latest version at time of writing: 1.21.4 |
| Dimensions | | 17 x 41 x 33 | | 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 |
|------------|--------|--|----------------------|
| IM04 | 1.19.3 | IM04_Compact_1000_Item_RAM.litematic | Schematic of device. |