

EC03: 16gt Item Encoder

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Tags: encoders, half-speed

Features

- Uses 9 carts for half-hopperspeed (16gt) throughput
- Requires only 1 item per type per chest.
- MTE compatible.
- Self resettable toggle states.

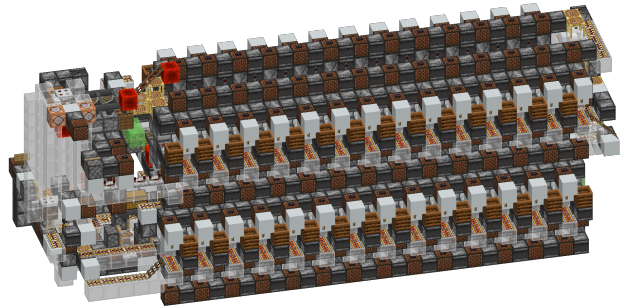


Figure 1: 16gt Item Encoder

Applications

- Encoding items

General Description

The EC03 16gt encoder has a 16gt throughput encoder core which only requires one item per type in a chest. It uses 9 carts but can be easily modified with cart yeeting in 1.19+ (carts in storage are all empty). It is dustup-dateless, honeyless, and MTE compatible.

Device Specifications

Table 1: Inputs

| Name | Range | Description |
|------------|-------|--------------------|
| Item input | Item | Item for encoding. |

Table 2: Outputs

| Name | Range | Description |
|-------------|-------|--|
| Item output | Item | Outputs the inputted item. |
| Item Code | Code | Outputs redstone signals corresponding to mapped code. |

Table 3: Device Specifications

| Parameter | Min. | Typ. | Max. | Unit | Conditions |
|------------|--------------|--------|------|--------|---|
| Throughput | 16 | - | - | gt | Normal Usage |
| Active Lag | +1 | +1.4 | +2 | ms | At half-hopperspeed. Ryzen 5 3600, 2GB RAM. MC 1.18.1 with Lithium. |
| MC Version | 1.13 | 1.18.2 | - | MCV | Latest version at time of writing: 1.19.3 |
| Dimensions | 38 x 15 x 11 | | | Blocks | |

Testing Data

Table 4: Executed Tests

| Test | Result |
|--------------------|---|
| Item encoding test | Device was able to encode with item input |
| Throughput test | Device was able to encode at 16gt throughput with randomized input. |

Download Information

Table 5: Download Information

| Identifier | MC | File | Description |
|------------|--------|--|---|
| EC03 | 1.18.2 | EC03_16gt_encoder_core_p2.litematic | Schematic of encoder. |
| EC03B | 1.19 | EC03_16gt_encoder_core_dispenser_1.19_p2.litematic | Schematic of encoder with 1.19+ cart dispenser. |