The TH Logger

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Final Project: ECE 378
Professor: Dr. Llamocca
External Temperature and Humidity Sensor (RHT03)

<table>
<thead>
<tr>
<th>DHT22 pins</th>
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<tbody>
<tr>
<td>1</td>
<td>VCC</td>
</tr>
<tr>
<td>2</td>
<td>DATA</td>
</tr>
<tr>
<td>3</td>
<td>NC</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
</tr>
</tbody>
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- Model: RHT03
- Power supply: 3.3-6V DC
- Output signal: digital signal via MaxDetect 1-wire bus
- Sensing element: Polymer humidity capacitor
- Operating range: humidity 0-100%RH; temperature -40~80 Celsius
- Accuracy: humidity ±2%RH (Max ±5%RH); temperature ±0.5 Celsius
- Resolution or sensitivity: humidity 0.1%RH; temperature 0.1 Celsius
- Repeatability: humidity ±1%RH; temperature ±0.2 Celsius
Initial Transmission
Detecting a ‘0’
Detecting a ‘1’
The Main FSM (ASM Form)
7-Segment Serializer FSM
(ASM Form)
Circuit Design