**សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ**

**មហាវិទ្យាល័យ វិស្វកម្ម**

**ដេប៉ាតឺម៉ង់ វិស្វកម្មទូរគមនាគមន៍ និងអេឡិចត្រូនិច**

**Google Assistant Control Self Balancing Robot**

**Subject: ESP Project**

**Professor: ​ បណ្ឌិត ថាប់​ ថារឿន**

**Teacher: សិស្សច្បង រាល​ សុវណ្ណឌឿ**

**Group 10: Mut visivai**

**Meng sreyneat**

1. List all of the components using in the **Google Assistant Controls Balancing Robot**

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| --- | --- | --- | --- |
| 1. ESP32 DEVKIT V1 board: 1x4.5$ | 1. Stepper Motor Driver A4988: 2x1.25$ | 1. Gyro sensor MPU6050: 1x1.5$ | 1. Stepper motor: 2x8$ |
| C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\DFEB891A.tmp | A4988 driver Stepper Motor Driver- Good Quality - Robosync |  | NEMA 17HS4401 Bipolar Stepper Motor |

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| --- | --- | --- | --- |
| 1. Servo Motor: 1x1.25$ | 1. Buzzer: 1x0.25$ | 1. Rocker Switch Día: 1x0.20$ | 1. Regulator 5v: 2x0.15$ |
| C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\DB03EB06.tmp | C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\F175B504.tmp | C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\A8BB55B2.tmp | C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\7380F090.tmp |

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| --- | --- | --- | --- |
| 1. Battery li-ion 3.7v: 2x2.20$ | 1. Battery Holder: 1x0.50$ | 1. Micro USB cable: 1x | 1. T-block 2 pins: 1x0.5$ |
| C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\262BF51E.tmp | C:\Users\DELL\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\4FC4FEDC.tmp | Original Micro-USB Cable for Gigaset MobileDock LM550 |  |

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| --- | --- | --- | --- |
| 1. Female and Male Pinout |  |  |  |
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