**Bijlage C, Tabel voor de microcontrollers specificaties.**

| **Micro-controller** | **CPU snelheid & architec-tuur** | **Geheu-gen (RAM / Flash)** | **RTOS** | **I/O GPIO’s** | **SPI / I²C / UART** | **DMA** | **Onder-steuning voor commodity’s** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ESP32-S3 (Arduino Nano ESP32, ESP32 Devkit)** | **Dual-core, 240 MHz (Xtensa LX7)** | **512 KB RAM, 8 MB Flash** | **FreeRTOS in-gebouwd** | **22 GPIO’s** | **4x SPI, 2x I²C, 3x UART** | **Ja** | **Grote community, veel bibliotheken, Arduino IDE onder-steuning** |
| **Teensy 4.1** | **Cortex-M7, 600 MHz (zeer krachtig!)** | **1024 KB RAM, 8 MB Flash** | **FreeRTOS com-patibel** | **55 GPIO’s** | **3x SPI, 3x I²C, 8x UART** | **Ja** | **Grote community, compatibel met Arduino IDE en mbed** |
| **STM32F4 / STM32F7** | **Cortex-M4/M7, 168-400 MHz** | **192-512 KB RAM, 512 KB - 2 MB Flash** | **FreeRTOS & mbed OS com-patibel** | **40+ GPIO’s** | **3x SPI, 2x I²C, 3x UART, CAN-bus** | **Ja** | **Veel industriële toepassingen, brede community** |
| **NXP KL25Z** | **Cortex-M0+, 48 MHz** | **16 KB RAM, 128 KB Flash** | **FreeRTOS com-patibel** | **30 GPIO’s** | **2x SPI, 2x I²C, 3x UART** | **Ja** | **Kleinere community, maar goed ondersteund in embedded toepassingen** |
| **Raspberry Pi RP2040 (Pi Pico)** | **Dual-core Cortex-M0+, 133 MHz** | **264 KB RAM, 2 MB Flash** | **FreeRTOS com-patibel** | **26 GPIO’s** | **2x SPI, 2x I²C, 2x UART** | **Ja** | **Sterke community, maar minder bibliotheken dan ESP32/STM32** |