

PIONEER: STM32 Smart Vehicle DevBoard

Optimized for four-wheel smart car applications
Accelerated and improved the tutorials in lab

STM32F103RCT6 · 72MHz · 48K RAM · 256K ROM
CAN transceiver | SPI Flash | IMU (MPU6050) | USB | LCD(SPI)

Embedded Software Development :

- Basic Examples: CLK、Debug、IT
- Examples for all peripherals : GPIO、UART (DMA/IT) 、SPI (DMA/IT) 、IIC (DMA/IT) 、CAN
- Examples for smart vehicle application: BLE controller (with ESP32) , Connect to control-board
- Bootloader based on USB-DFU: Download firmware directly rather than through UART nor ST-Link
- FreeRTOS integrated
- Port LVGL (a GUI framework) :

- Optimization approaching performance limits (SPI through DMA, manual malloc buffer, double frame-buffer)
- Achieve 30fps@240*240 resolution with acceptable RAM and ROM usage

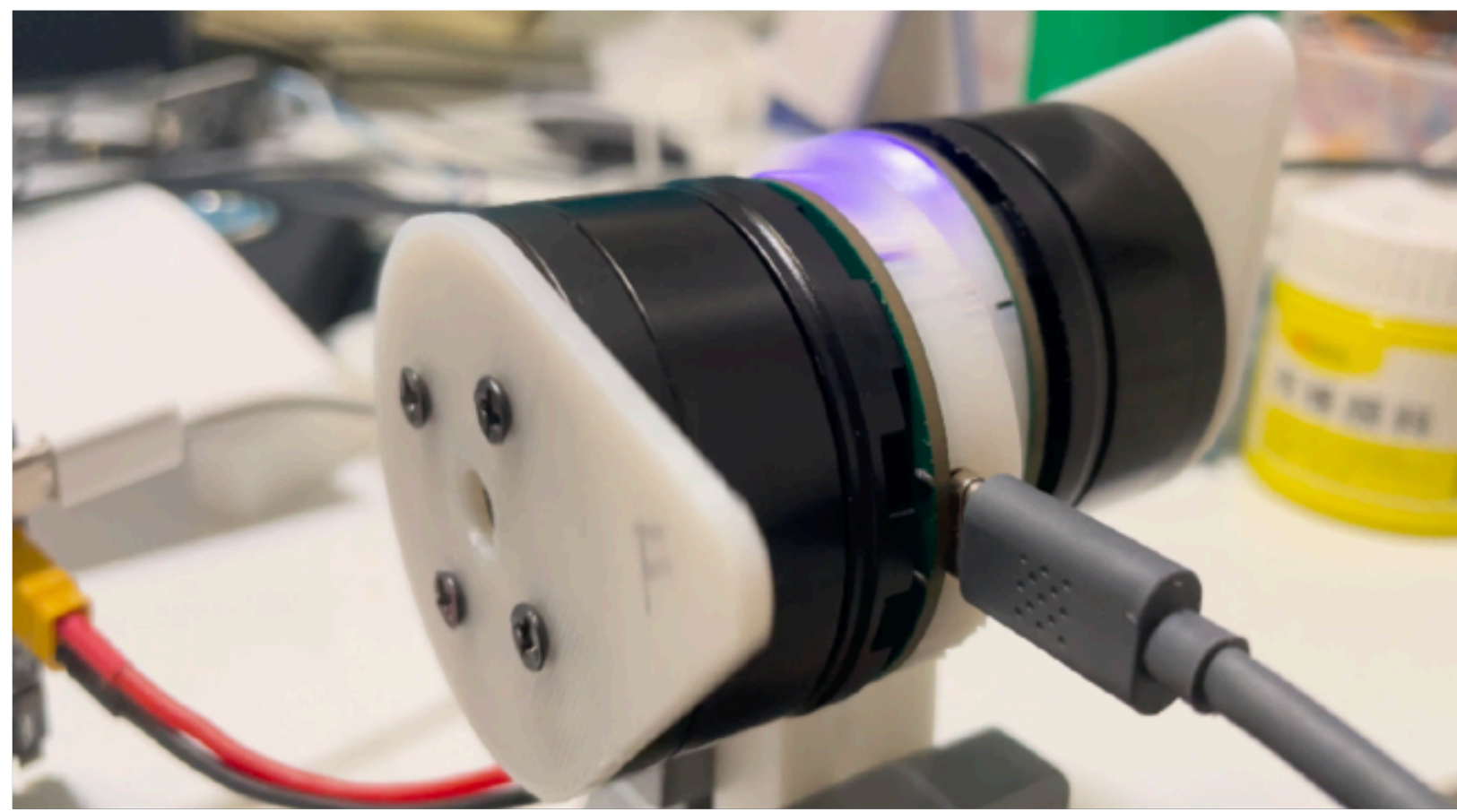
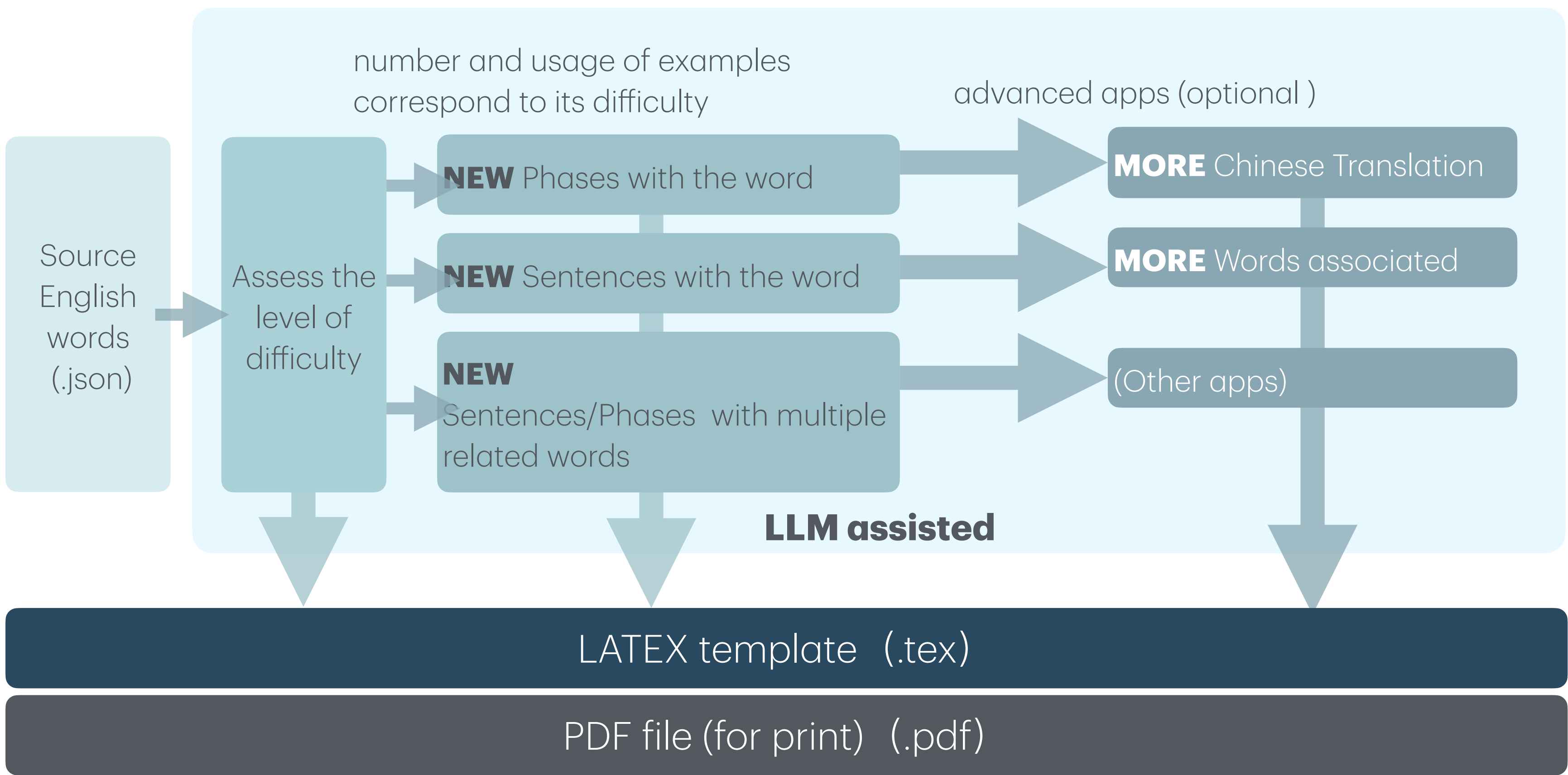
Memory region	Used Size	Region Size	%age Used
RAM:	40232 B	48 KB	81.85%
FLASH:	184084 B	256 KB	70.22%

99	pertinent ⁵	102	insurance ⁶
<ul style="list-style-type: none">• He asked me a lot of very pertinent questions .• The questions were pertinent to the discussion and helped to clarify the topic.• pertinent data		<ul style="list-style-type: none">• Your father took out insurance to cover the mortgage.• The small business owner purchased insurance to protect against potential losses.• insurance company• medical insurance• health insurance• life insurance• social insurance• insurance industry	
100	certify ⁶	103	authority ⁷
<ul style="list-style-type: none">• The accounts were certified by an auditor.• The company certified the technician to ensure he was qualified to repair their equipment.		<ul style="list-style-type: none">• an agreement between the US and Colombian authorities• The principal exercised his authority over the school by enforcing strict rules and regulations.• competent authority 【法】主管当局，主管部门• authority on 有关…的权威；…的专家• local authority 地方当局；地方政权• administrative authority 行政当局• tax authority 税务机关• public authority 公共机关；政府当局	
101	revenue ⁵	104	endorse ⁶
<ul style="list-style-type: none">• advertising revenue• Strikes have cost £20 million in lost revenues .• The company's revenue increased by 20% last quarter.• tax revenue• sales revenue• revenue and expenditure• inland revenue• fiscal revenue		<ul style="list-style-type: none">• I can endorse their opinion whole-	

MEMORIZE: LLM Assisted Word Memorization

Generate example sentences of varying difficulty for words
Create Latex-formatted documents.

- Local large language model
- Assess the difficulty of words in real contexts (rather than based on word length), with the difficulty level indicated by the number in the top right corner.



Brushless motor drive controller

TAng Published on 2023-02-02 11:58:06

CC BY-NC protocol

Category: Embedded

Complaints about infringement

Sales: 319 ★ 25 📈 29 📦 0

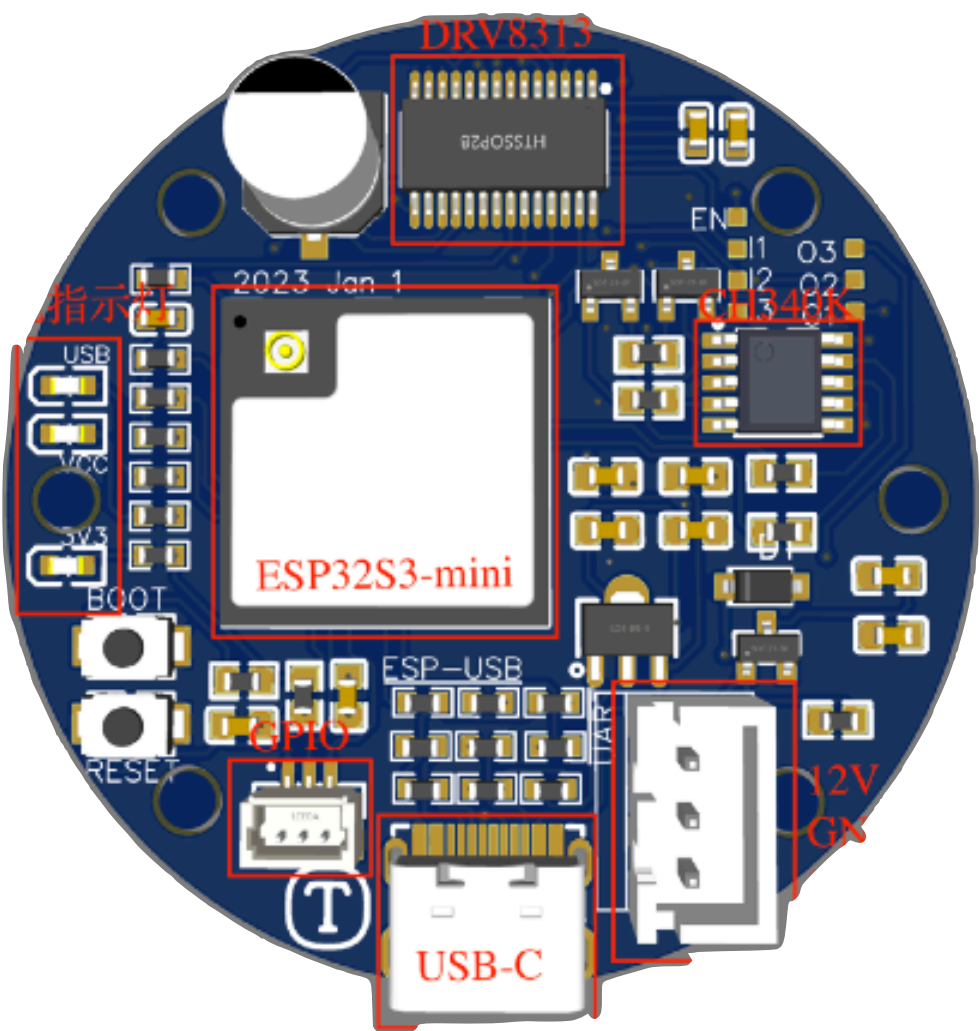
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Download my plan

Brushless Motor Drive Control Board

High performance BLDC driver with FOC algorithm

- Achieve 318 sales, ranking in the top 5% of the [JLC·Hardware Community](#).



- ESP32-S3 SOC
- DRV8313 driver (MOS integrated)
- AS5600 magnetic encoder
- Program with C/C++
- Port FOC algorithm (with open-source SimpleFOC)
- Wi-Fi/BLE for command and debug

