

# Electronic Speed Controller References

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## Application Notes

- Renesas AN1325: [“Choosing and Using Bypass Capacitors”](#)
- Fairchild AN-6076: [“Design and Application Guide of Bootstrap Circuit...”](#)
- TI: [“Bootstrap Circuitry Selection for Half-Bridge Configurations”](#)
- TI: [“Fundamentals of MOSFET and IGBT Gate Driver Circuits”](#)
- Toshiba: [“MOSFET Gate Drive Circuit Application Note”](#)
- ST AN2867: [“Guidelines for oscillator design on STM32 MCUs”](#)
- Analog MT-101: [“Decoupling Techniques”](#)
- International Rectifier AN-978: [“HV Floating MOS-Gate Driver ICs”](#)
- ST AN4555: [“Getting started with STM32L4 Series hardware development”](#)
- ST: [STM32L476xx Datasheet](#)

## Reference Circuits

- Northwestern: [“Driving a high current DC motor using an H-Bridge”](#)
- Universitas Negeri Semarang: [“Design of Brushless DC Motor Driver...”](#)
- Altium: [“100A 12V H-Bridge Project”](#)
- Phil’s Lab: [KiCAD 6 STM32 PCB Design Tutorial](#)

## General Information

- Modular Circuits: [H-Bridge Secrets](#)
- Analog: [Reverse-Current Circuitry Protection](#)
- Digikey: [Getting started with STM32...](#)
- ST UM2609: [“STM32CubeIDE user guide”](#)
- [Power MOSFET selection and application](#) (video)
- [Why gate drivers are needed](#) (video)

## Miscellaneous

- Gantt Chart: [📅 Capstone Schedule](#)
- Part order spreadsheet: [📅 Seidakhmetov-Wilbur-Digikey-1](#)
- GitHub repository: <https://github.com/JoshWilbur/Electronic-Speed-Controller>
- [Battery powered STM32 PCB](#)
- [Voltage regulator overheating thread](#)