

Diagram illustrating the STM32L431 microcontroller pinout and internal block diagram for various pin configurations. The diagram is organized into a grid of 16 sections, each representing a different pin configuration (e.g., 1 Orange/W, 2 Orange, 3 Green/W, 4 Blue, 5 Blue/W, 6 Green, 7 Brown/W, 8 Brown).

Each section includes:

- Pin Configuration Table:** A table listing the pins and their functions (e.g., A+, SIN+, RX+, STEP+).
- Internal Block Diagram:** A schematic showing the internal components of the STM32L431, including the Cortex-M4 core, SRAM, Flash, and various peripheral blocks (e.g., ADC, DAC, I2C, SPI, UART, CAN, USB).
- Pinout Diagram:** A diagram showing the physical pinout of the microcontroller, with pins labeled by color and function.

The diagram is divided into four main groups, each containing four sections. The groups are labeled with the pin configuration (e.g., 1 Orange/W, 2 Orange, 3 Green/W, 4 Blue, 5 Blue/W, 6 Green, 7 Brown/W, 8 Brown).