This section describes the processor memory map, the behavior of memory accesses, and the bit-banding features. The processor has a fixed memory map that provides up to 4 GB of addressable memory.

The regions for SRAM and peripherals include bit-band regions. Bit-banding provides atomic operations to bit data, see Section 2.2.5: Bit-banding on page 28.

The processor reserves regions of the Private peripheral bus (PPB) address range for core peripheral registers, see Section 4.1: About the STM32 core peripherals on page 105.