# Chapter 1. Non-Secure

## 1.1 Overview

There are clock generation unit (CGU), reset generation unit (RGU), IO share unit and top global registers unit in non-secure block. All units are work at 20MHz and access through APB interface connected to NOC.

### 1.1.1 CGU

* The CGU generates clocks for all IP.
* Select different frequency for specified IP.
* Gate clock for specified IP.
* Generate divided clock for specified IP.
* Access through APB interface.

### 1.1.2 RGU

* The RGU generates resets for all IP.
* Generate debounce and delay logic for power up reset.
* Generate soft reset for specified IP.
* Access through APB interface.

### 1.1.3 IO Share

* All IOs can be configurable via registers
* Function switch
* Pull-up/down
* Driver strength
* Up to 5 IOs shared on one.
* Access through APB interface.

### 1.1.4 TOP GR

* This unit includes global registers for specified IP, for example SRAM, Boot ROM, H265, H264, JPEG, DISP, SMMU.
* Includes PMU registers.
* Access through APB interface.