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Smart Machine Smart Decision

SIM900D_SIM300D/340D _Comparison_Hardware Design_V1.03

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SIM900D VS SIM300D/340D

- **Compared to the SIM300D/340D, the signals added on SIM900D are:**
  - An additional PWM for driving the buzzer and the backlight;
  - The sim card detection function, which is switched on by AT+CSDT=1, and multiplexed with GPIO on pin no.10;

- **Pin function differences between SIM900D and SIM300D/340D are summarized as following:**

PIN NO.	SIM300D/340D	SIM900D
10	GPIO (be used to wake up SIM3XXD, as the same to DTR)	GPIO/SIM_PRE
40	GPIO/Buzzer	GPIO
47	NC	PWM

SIM900D VS SIM300D/340D Difference

Difference	SIM300D/340D	SIM900D
POWER SUPPLY:	3.4~4.5V	3.2~4.8V
POWER ON TIME	T_{on}>2S	T_{on}>1S
POWER OFF TIME	0.5S< T_{off}<1S	T_{off}>1S
UNDER-VOLTAGE WARNNING	VBAT≤ 3.5V	VBAT≤ 3.3V
UNDER-VOLTAGE POWER DOWN	VBAT≤ 3.4V	VBAT≤ 3.2V
OVER-VOLTAGE WARNNING	VBAT≥ 4.5V	VBAT≥ 4.7V
OVER-VOLTAGE POWER DOWN	VBAT≥ 4.6V	VBAT ≥ 4.8V
BAND	For SIM300D: 900/1800/1900 SIM340D:850/900/1800/1900	850/900/1800/1900

Difference	SIM300D/340D	SIM900D
VRTC *	1.8V	3V
PWRKEY *	PULLED UP TO VBAT	PULLED UP TO 3V
TYPICAL GPIO VOLTAGE*	V_{IO}= 2.93V(typical)	V_{IO}= 2.8V (typical)
VOLTAGE AT DIGIT PINS* (absolute maximum rating)	Vmin=-0.3V Vmax=3.3V	Vmin=-0.3V Vmax=3.1V
ADC0 *	0~2.4V/12bit	0~2.8V/10bit
AUTOBAUDING *	1200~115200bps	1200~57600bps
DEBUG PORT *	used for debugging	used for debugging and firmware upgrading

****Note: Due to the different platforms.***

SIM900D VS SIM300D/340D

- The SIM900D is pin to pin compatible with the SIM300D/340D.

  About the detailed difference in their software design, please refer to "SIM900_SIM300_ATC_Comparison_V1.01" and "SIM900_ATC_V1.02".