

UART2_ReportIMU data frame format

0xA5	0x5A	0x12	0xA1	Yaw	Pitch	Roll	Height	Temperature	Barometric pressure	Solver speed	Check	0xAA
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0xA5 0x5A Starting byte frames

0x12 Representatives, followed by a 18 [hex 12] bytes of data.

0xA1 rame identification byte, which indicates the frame with the angle data after solver

Yaw After heading the calculated angle. Units of 0.1 degrees 0 -> 3600 corresponds to 0 -> 360.0 degrees

Pitch Pitch angle obtained solver, unit 0.1 degrees. -900--900 Correspond -90.0 -> 90.0 degrees

Roll After the roll angle obtained solver, unit 0.1 degrees. -1800--> 1800 corresponding to -180.0 -> 180.0 de0rees

Height Unit 0.1 m. The scope of an integer variable

Temperature Unit 0.1 degree Celsius range: Until your circuit board does not work

Barometric pressure Unit 10Pa

Solver speed Attitude arithmetic IMUperse c per second.

Check The above data, in addition to starting byte A5 5A outer accumulate conjunctive do low byte checksum

0xAA End byte

UART2_ReportMotion data frame format

0xA5	0x5A	0x16	0xA2	ACCx	ACCy	ACCz	GYROx	GYROy	GYROz	Mx	My	Mz	Check	0xAA
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0xA5 0x5A Starting byte frames

0x16 Representatives, followed by a 22 [hex 16] bytes of data

0xA2

ACCx Frame identification byte, which indicates the frame with the sensor output value

ACCy X axis acceleration ADC output range: a signed integer

ACCz AD C Y-axis acceleration output range: a signed integer
Z-axis acceleration ADC output range: a signed integer

GYROx AD C X-axis gyro output range: a signed integer

GYROy AD C Y axis gyro output range: a signed integer

GYROz AD C Z axis gyro output range: a signed integer

Mx X-axis magnetic compass AD C output range: a signed integer

My Y-axis magnetic compass AD C output range: a signed integer

Mz Z-axis magnetic compass AD C output range: a signed integer

Check The above data, in addition to starting byte A5 5A outer accumulate conjunctive do low byte checksum

0xAA End byte