Vital Signs Demo Package Structure

Packet	Length	Type
Magic Word (0x0102, 0x0304, 0x0506, 0x0708)	8 Bytes	
Frame Number	4 Bytes	uint32
Number of samples (4 Bytes units) **transmitted through the UART per frame**	2 Bytes	uint16
Object range bin	2 Bytes	uint16
Signal Value at the object Range bin (Magnitude)	4 Bytes	Float
Cycle count for vital signs Processing	4 Bytes	uint32
Start Index for the Range	2 Bytes	uint16
End Index for the Range	2 Bytes	uint16
Frame rate (in Hz)	4 Bytes	Float
Unwrapped phase value from the object range bin (-π to π)	4 Bytes	Float
Breathing waveform	4 Bytes	Float
Cardiac waveform	4 Bytes	Float
Reserved	8 Bytes	Float
Breathing Rate computed from the FFT	4 Bytes	Float
Heart Rate computed from the FFT	4 Bytes	Float
Breathing rate from peak counting	4 Bytes	Float
Heart rate from peak counting	4 Bytes	Float
Confidence Metric for the breathing rate (SNR)	4 Bytes	Float
Confidence Metric for the heart rate (SNR)	4 Bytes	Float
Breathing Waveform Energy	4 Bytes	Float
Heart Waveform Energy	4 Bytes	Float
Complex Range Profile (Real and Imaginary are each int16)	4 * (# of Range bins)	int16

TEXAS INSTRUMENTS