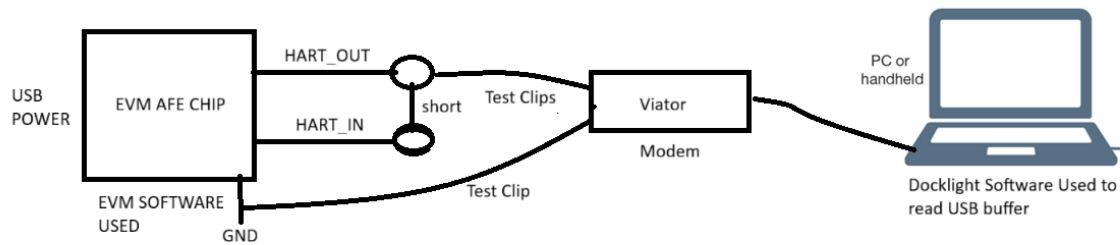


Connection of HART EVM and Viator Modem as below:



Aim of design: HART Communication without implementation of current loop.

Info: Interface with AFE EVM – SPI+UART

Case 01:

HART OUT Signal when EVM sends data:

HART Modem

HART Enable ☒

Tx Amplitude: 500 mVpp

Tx Frequency: 0: 38.4 kHz @ 1200 BAUD

HART TX Data:

x 11	
x 22	
x 33	
x 44	
x 55	
x 66	

WR FIFO

RD FIFO

CLEAR LIST

High Order Filter En ☐

Duplex Mode ☐

Enable Ext Filter ☐

Disable HART TX ☐

RTS ☐ CD ☒ Enable polling to read.

Viator receives data on Docklight:

Docklight V2.4 (Eval)

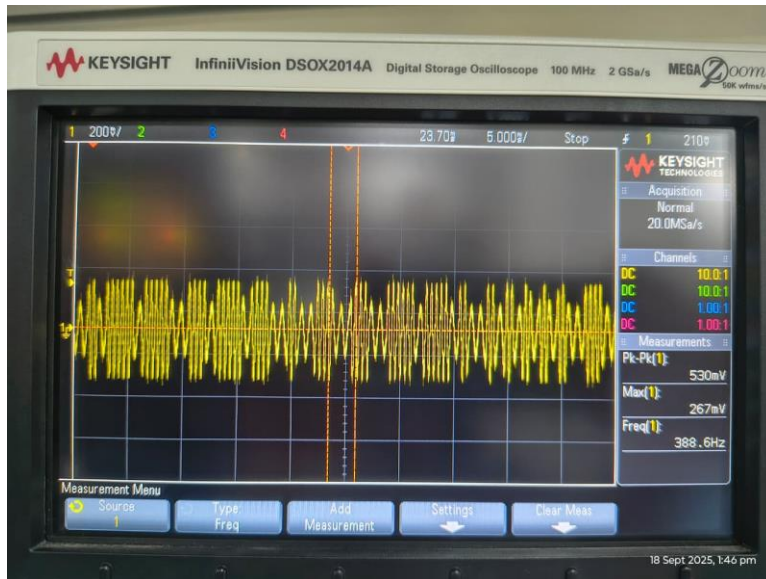
File Edit Run Tools Help Stop Communication (F6)

Communication port open

Send Sequences

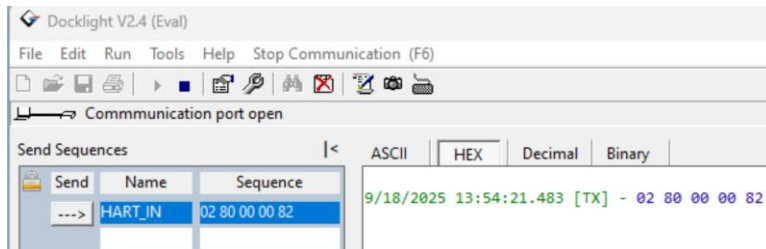
Send	Name	Sequence
		C4 91 33 44 55 66 00

HART WAVEFORM:

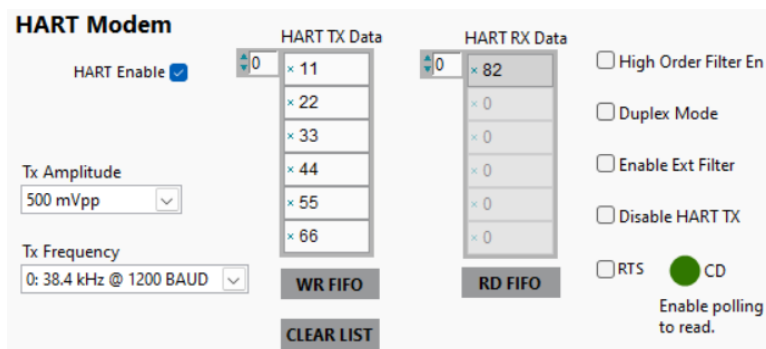


Case 02:

Data sending from Viator to EVM



Data receiving at AFE chip software:



HART WAVEFORM:



Viator link:

https://files.pepperl-fuchs.com/webcat/navi/productInfo/doct/tdoct5943b_eng.pdf?v=20211206115041