

*OPEN SOURCE
APPLICATIONS
FOR US-ARRAY
V0 02/19*

Following print screens are coming from open source applications delivered with US-ARRAY system.

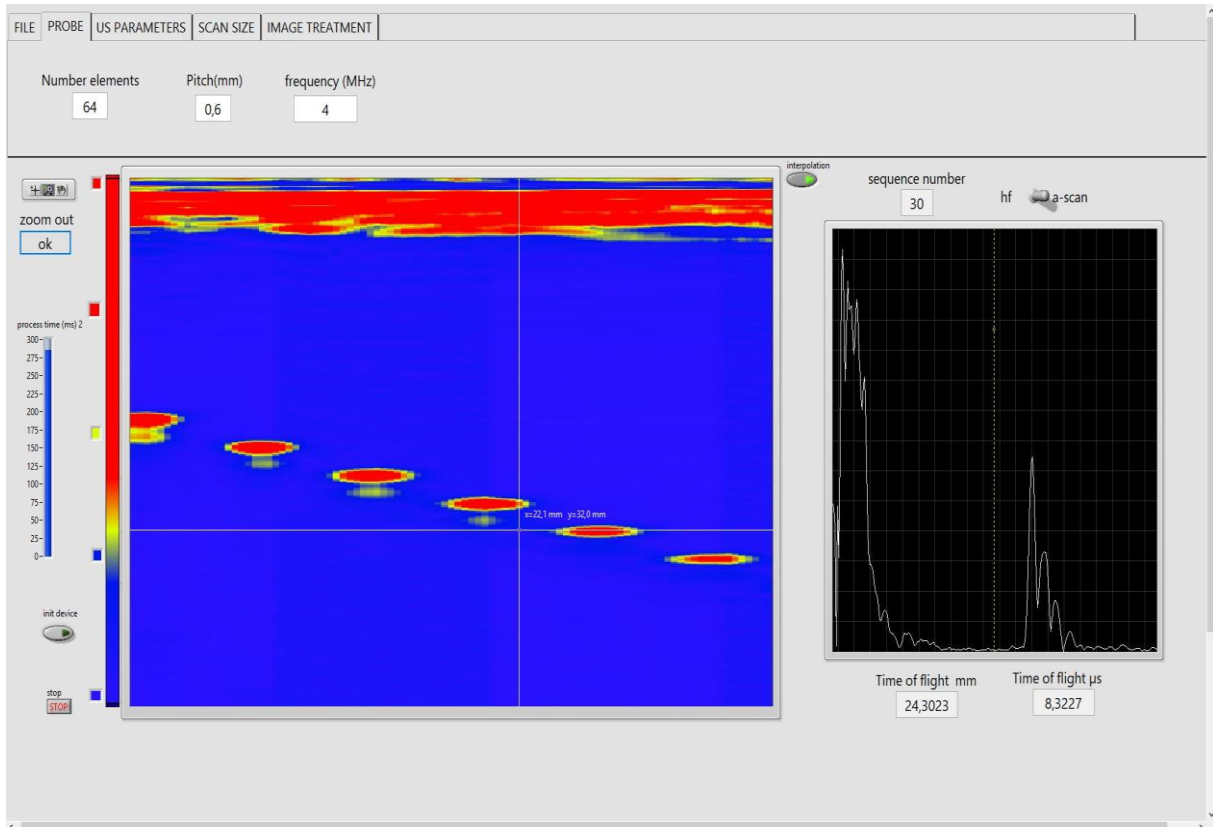
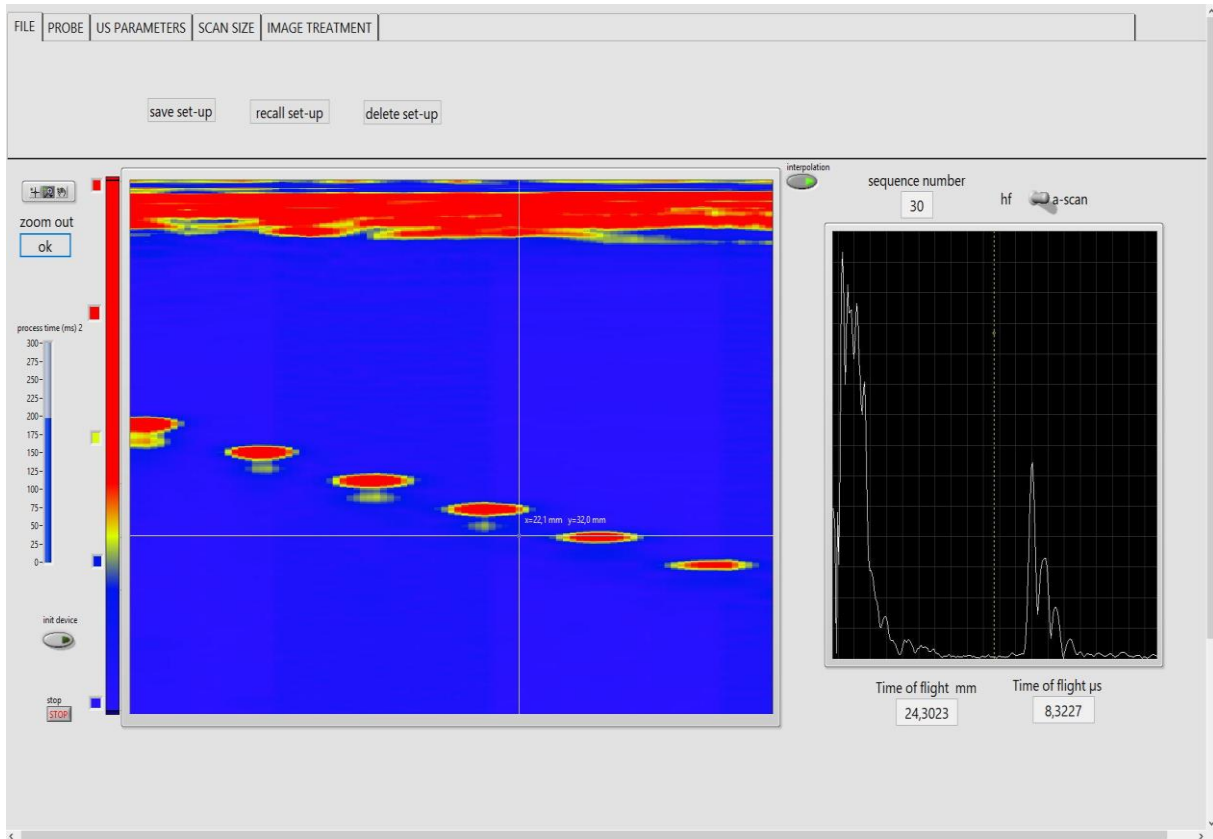
The focusing one is written in labview

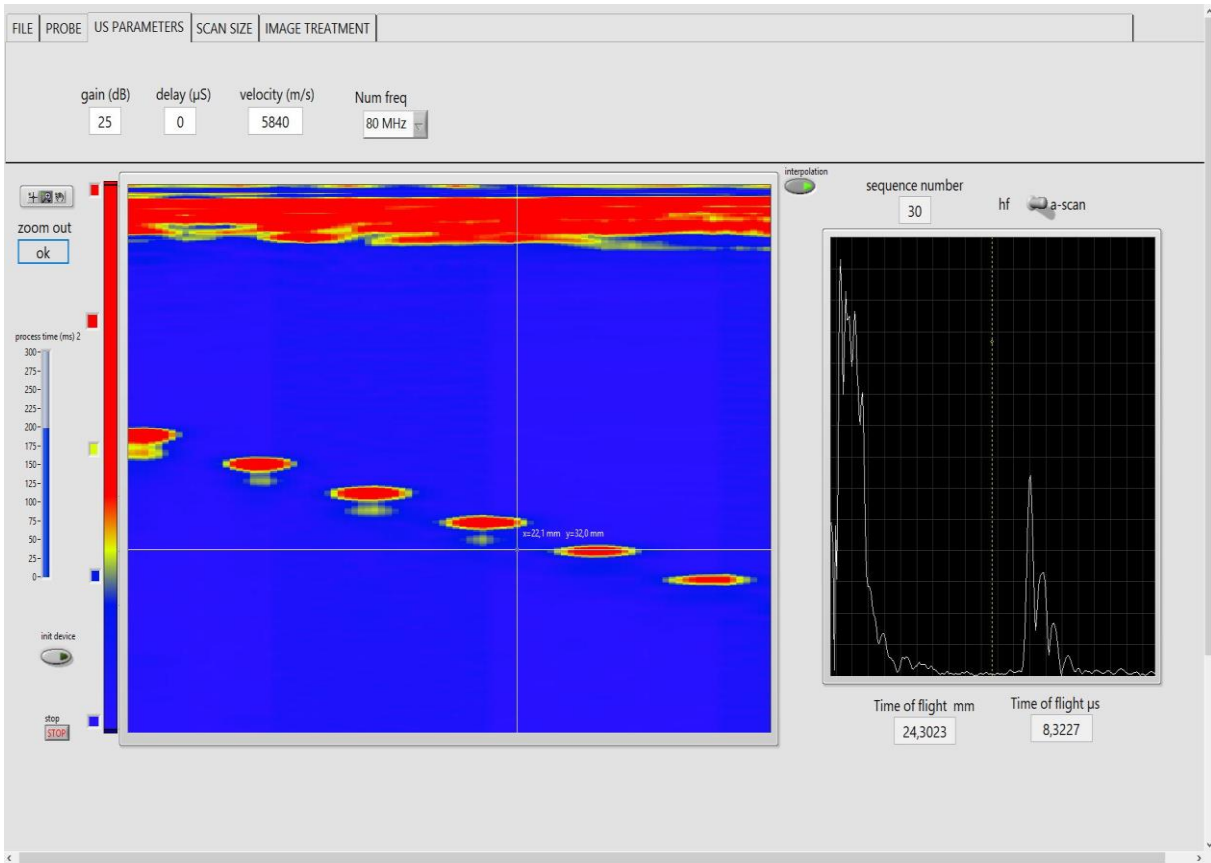
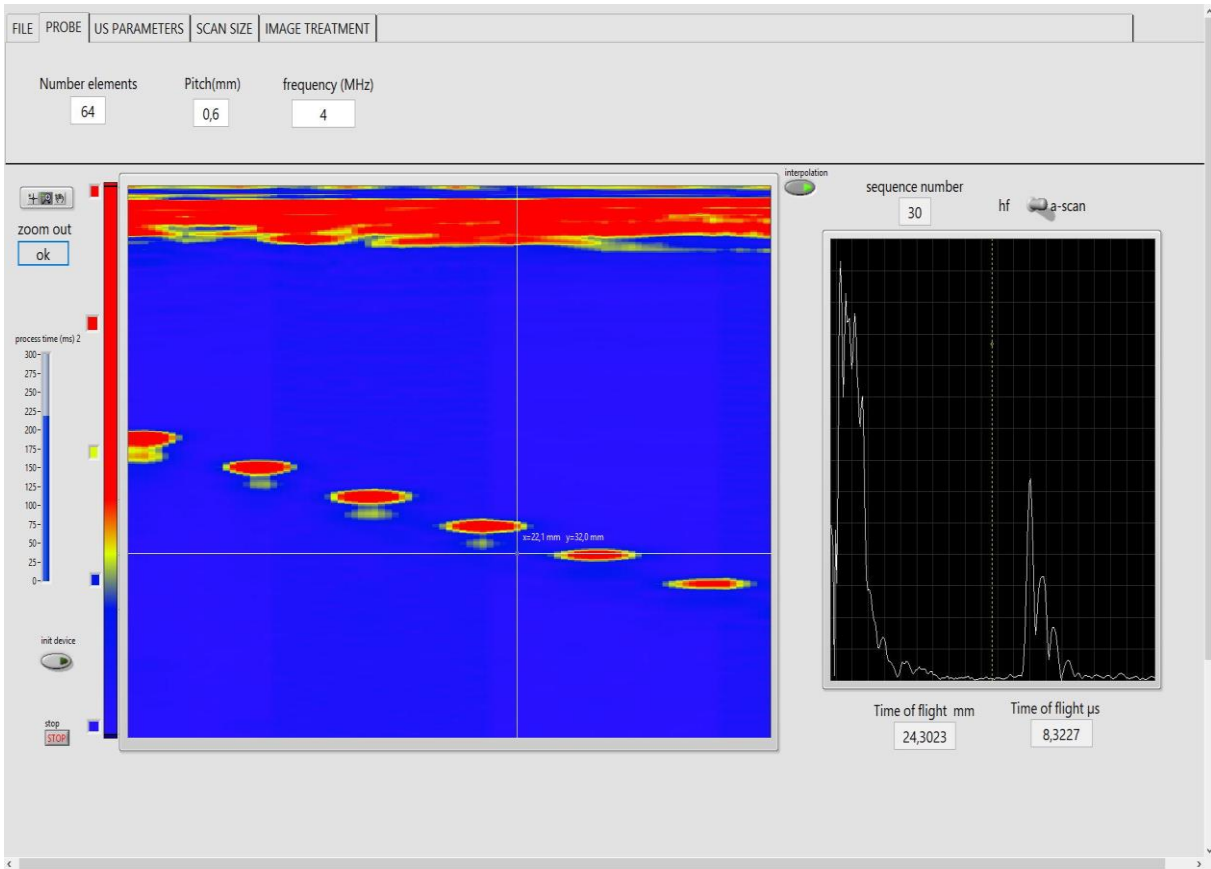
The TFM (total focusing method) is written in labview

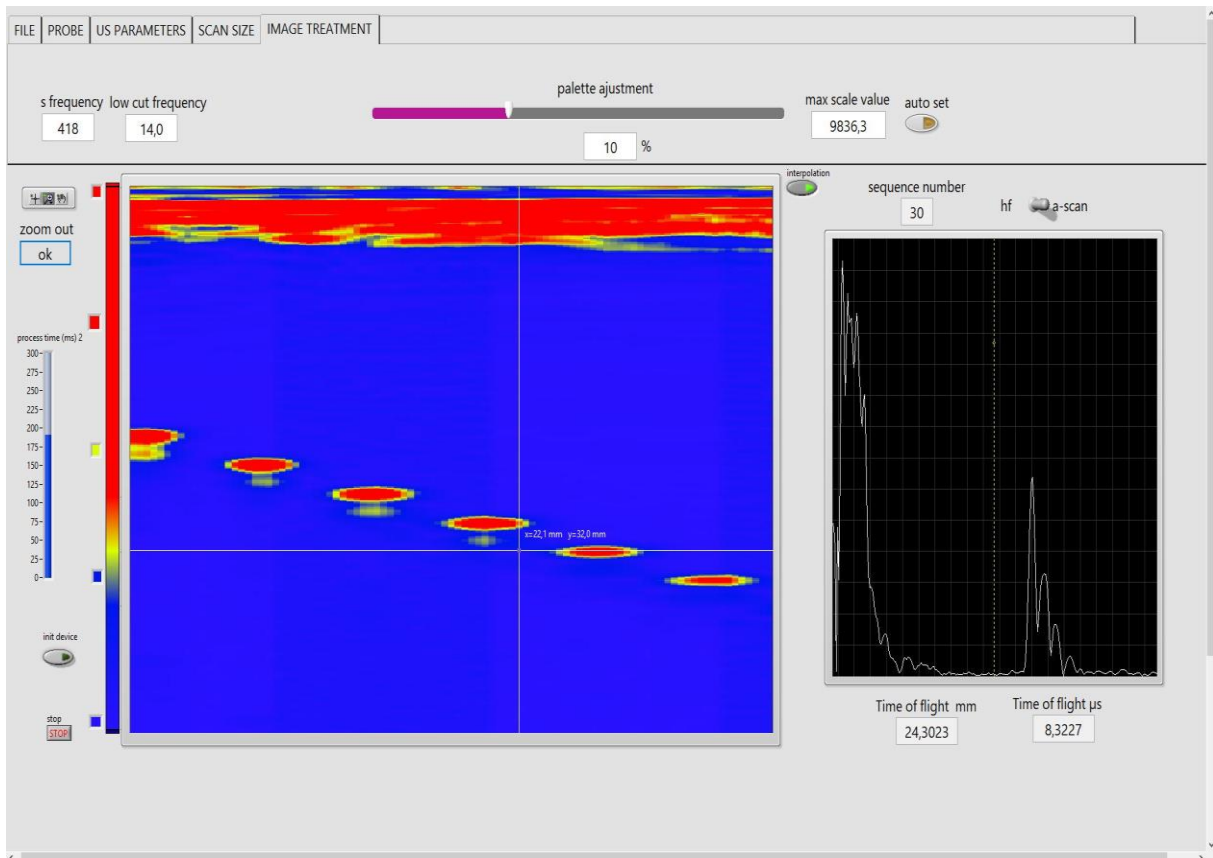
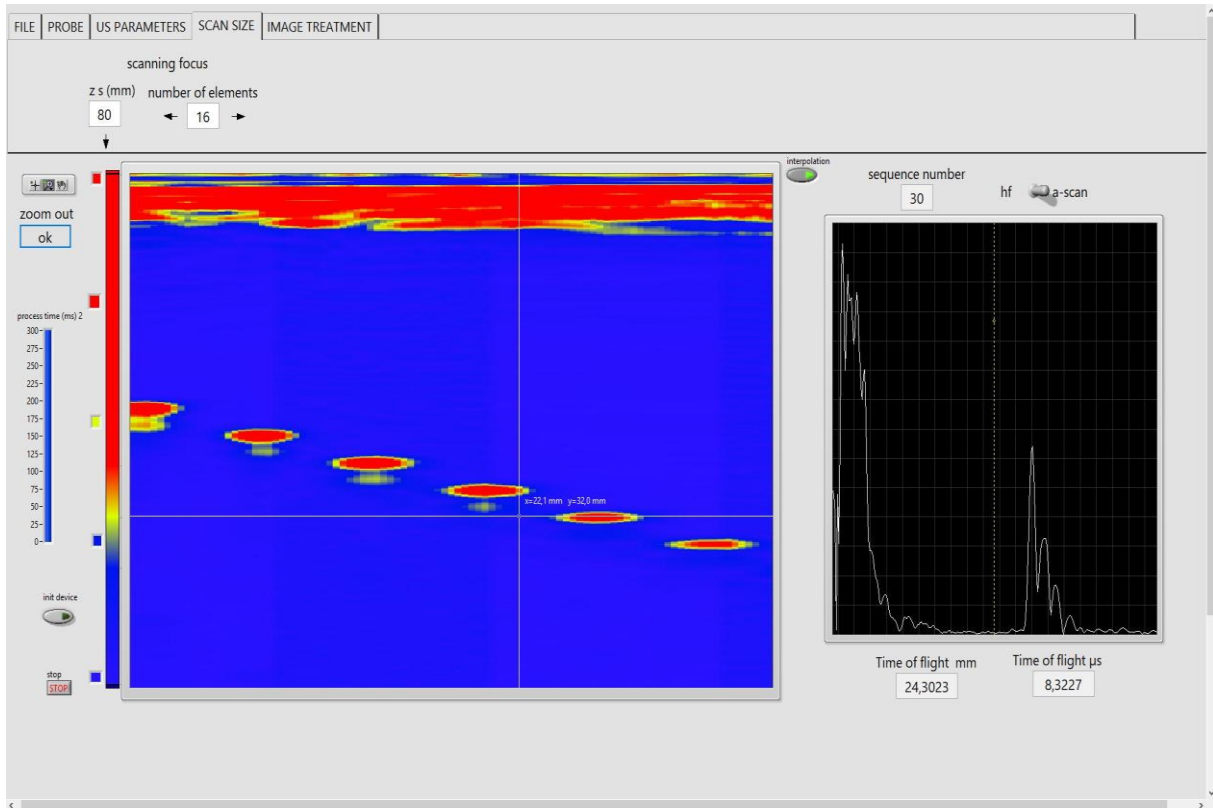
The last one is written in visual basic for excel.

The user is allowed to modify, adapt the software and distribute it free of charges.

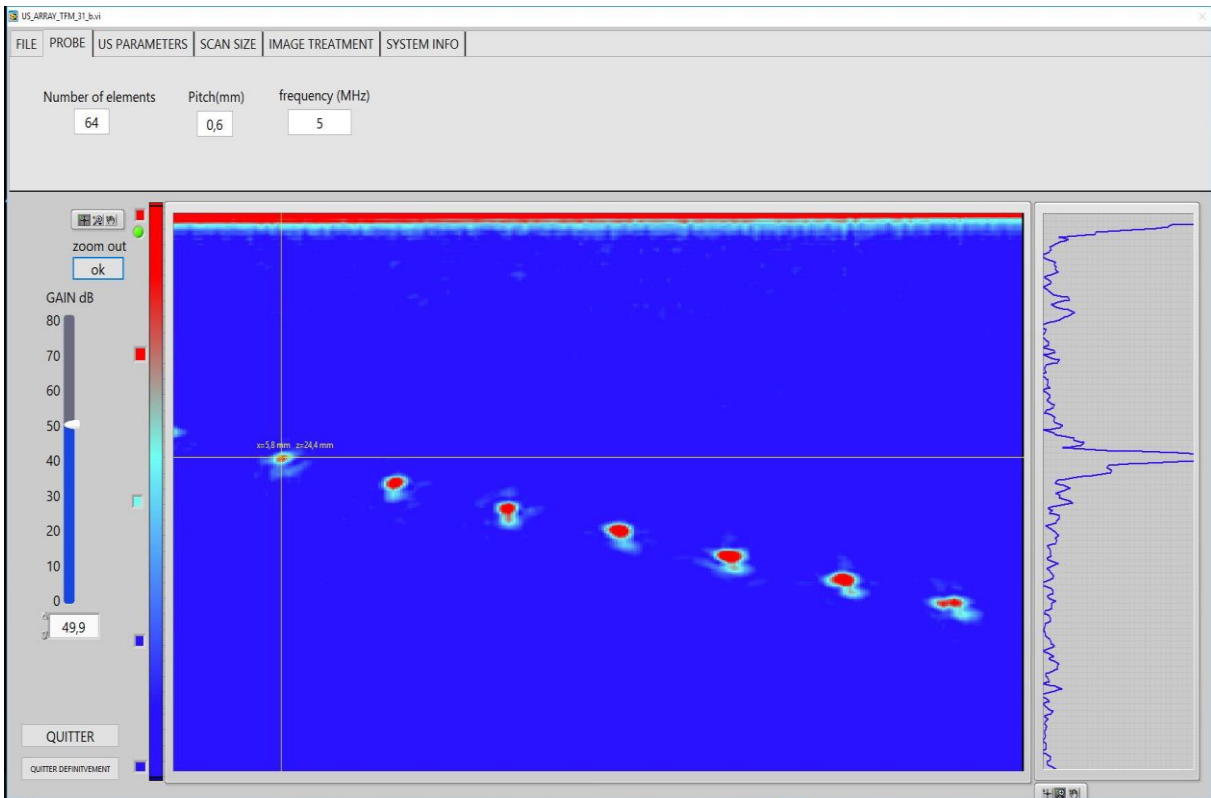
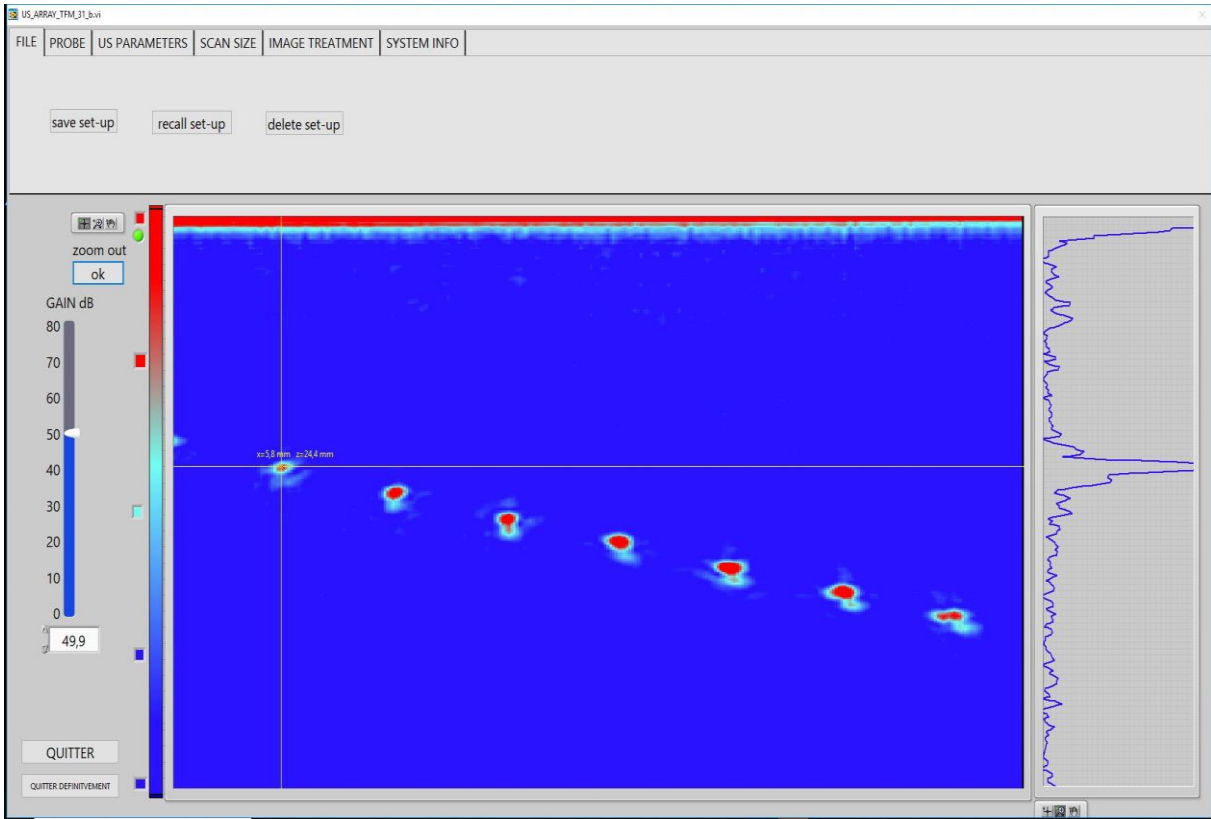
FOCUSING APPLICATION

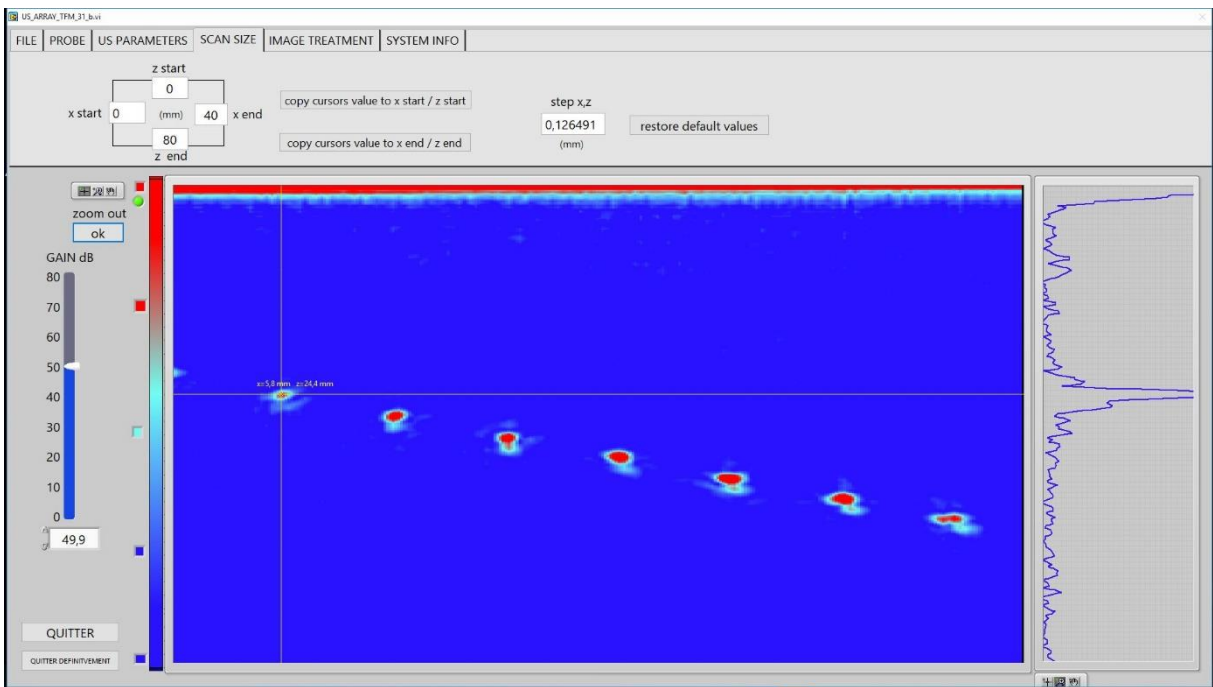
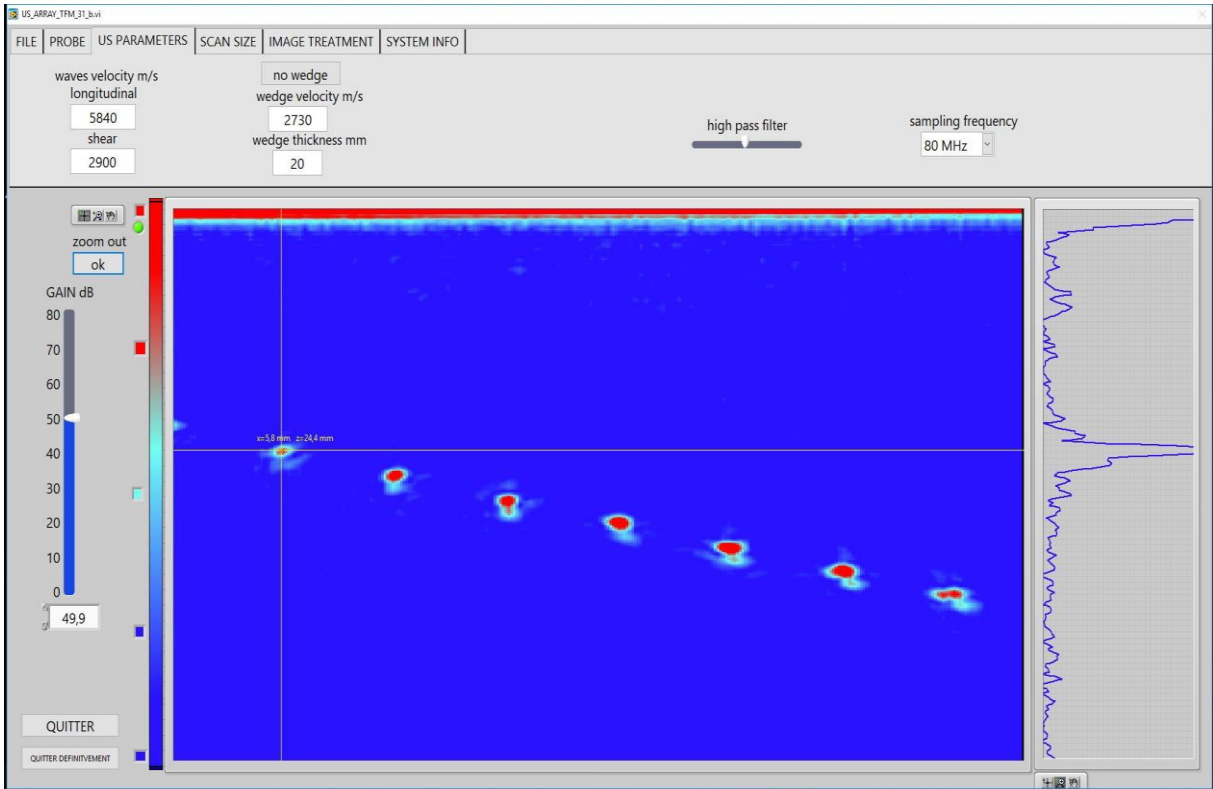


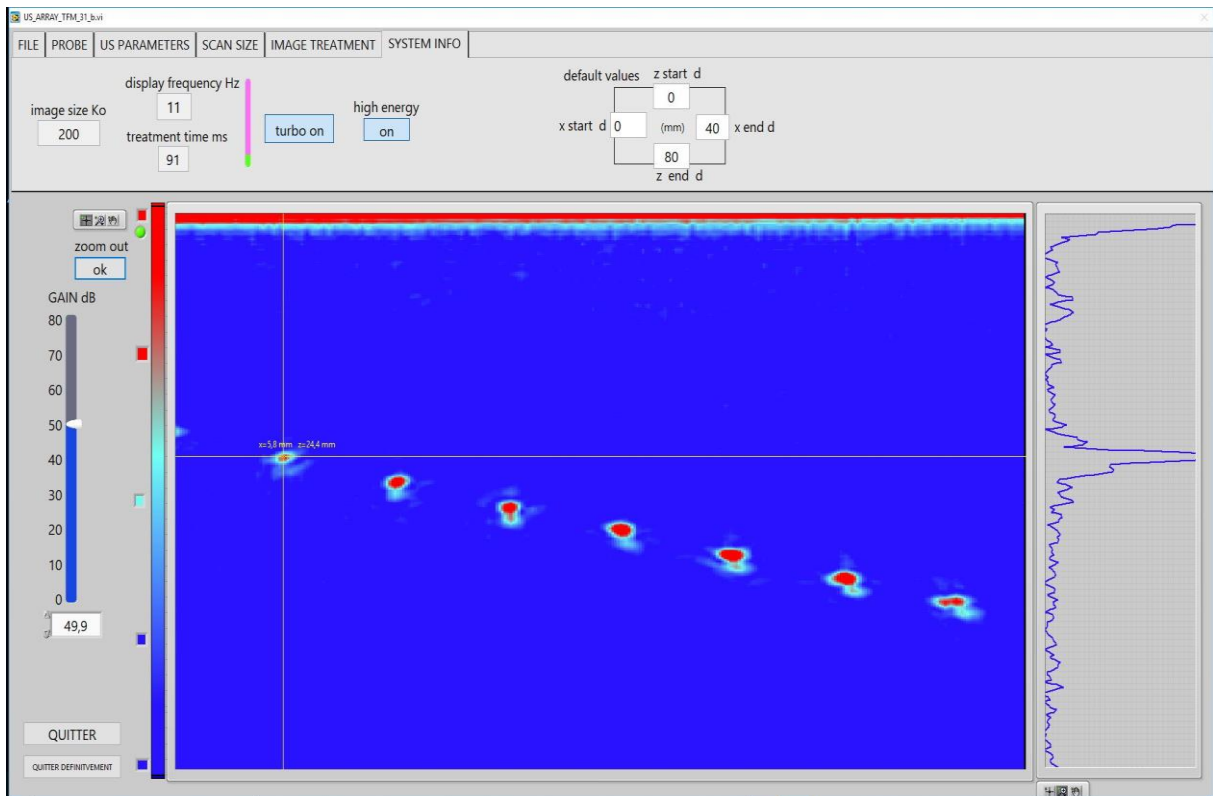
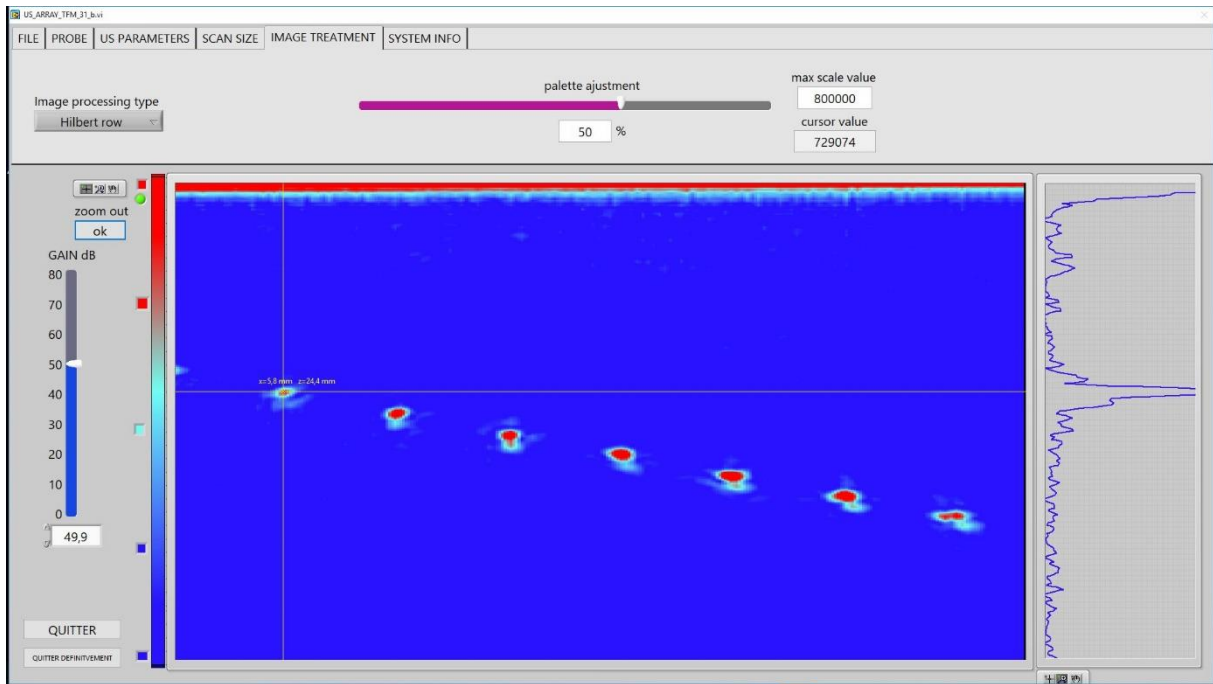




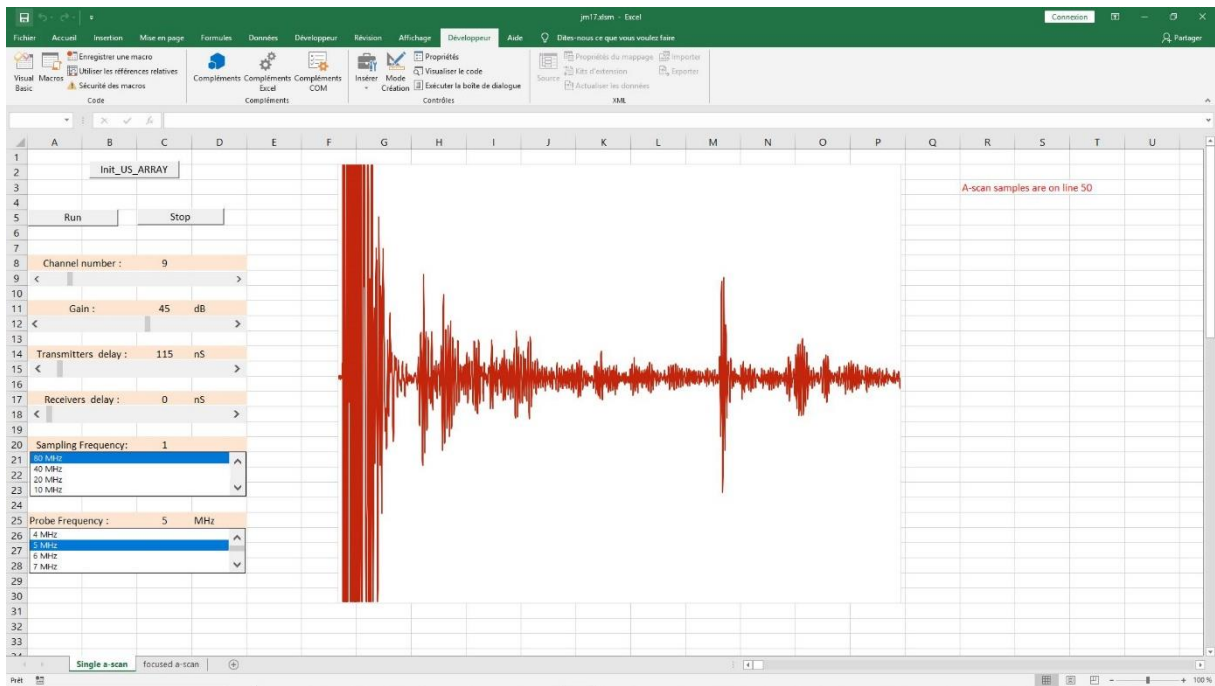
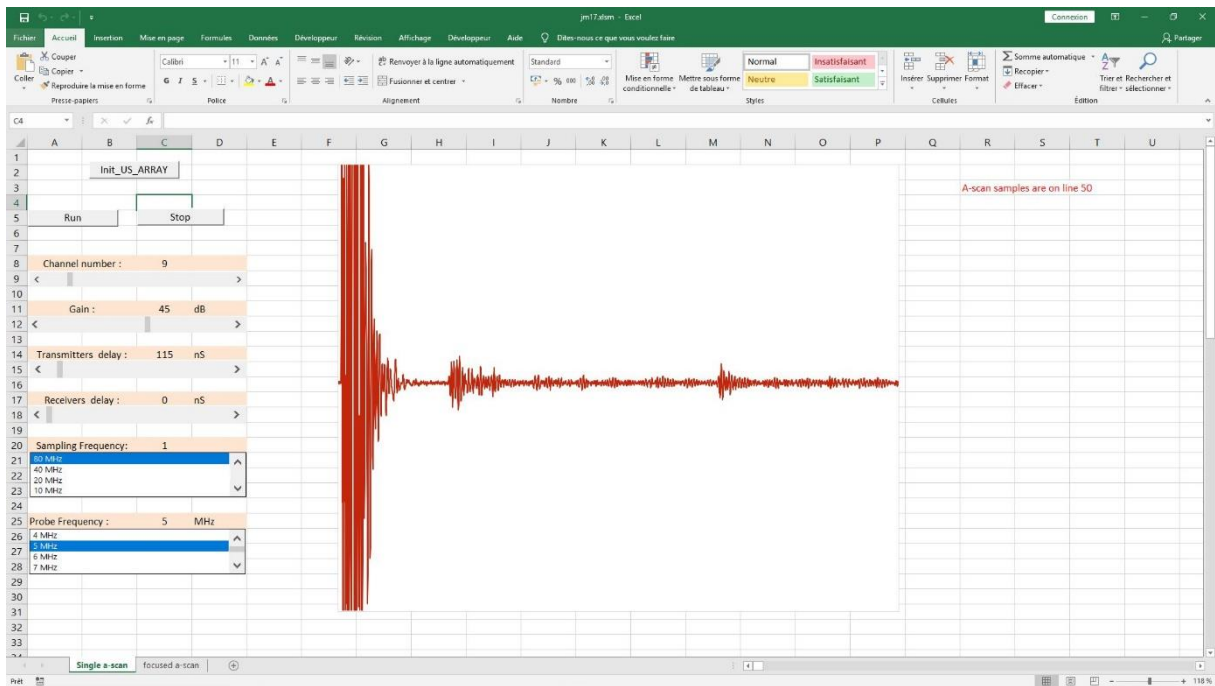
TFM APPLICATION







EXCEL VISUAL BASIC APPLICATION



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Microsoft Visual Basic pour Applications - jm7atim - [Module1 (Code)]
(General)
Private Declare Function testjml Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function peek Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Init_USB_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Open_USB_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Init_Device_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Data_RF_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Focus_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Gain_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Transmitter_Delay_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Receiver_Delay_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Sampling_Freq_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Transmitter_Wave_XLS Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal B As Double) As Double
Private Declare Function Data_RF_XLS_Focus Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal A As Double, ByVal B As Double, ByVal C As Double, ByVal D As Double, ByVal E As Double, ByVal F As Double, ByVal G As Double, ByVal H As Double, ByVal I As Double, ByVal J As Double, ByVal K As Double, ByVal L As Double, ByVal M As Double, ByVal N As Double, ByVal O As Double, ByVal P As Double, ByVal Q As Double, ByVal R As Double, ByVal S As Double, ByVal T As Double, ByVal U As Double) As Double
Private Declare Function Data_Hilbert_XLS_Focus Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal A As Double, ByVal B As Double, ByVal C As Double, ByVal D As Double, ByVal E As Double, ByVal F As Double, ByVal G As Double, ByVal H As Double, ByVal I As Double, ByVal J As Double, ByVal K As Double, ByVal L As Double, ByVal M As Double, ByVal N As Double, ByVal O As Double, ByVal P As Double, ByVal Q As Double, ByVal R As Double, ByVal S As Double, ByVal T As Double, ByVal U As Double) As Double
Private Declare Function Data_scan_XLS_Focus Lib "C:\US-ARRAY\data\US-ARRAY-XLS.dll" (ByVal A As Double, ByVal B As Double, ByVal C As Double, ByVal D As Double, ByVal E As Double, ByVal F As Double, ByVal G As Double, ByVal H As Double, ByVal I As Double, ByVal J As Double, ByVal K As Double, ByVal L As Double, ByVal M As Double, ByVal N As Double, ByVal O As Double, ByVal P As Double, ByVal Q As Double, ByVal R As Double, ByVal S As Double, ByVal T As Double, ByVal U As Double) As Double

Global run As Double
Dim B As Double
Dim A As Double
Dim C As Double
Dim D As Double
Dim E As Double
Dim F As Double
Dim G As Double
Dim H As Double
Dim I As Double

Dim tableau(5000) As Double
Dim V As Double
Dim TabAbscisses(1000) As Double
Dim TabOrdonnees(1000) As Double
Sub InitFocus()
    B = 0
    A = Init_USB_XLS(B)
    A = Open_USB_XLS(B)
    A = Init_Device_XLS(B)
    B = Range("C11:C11")
    A = Gain_XLS(B)
    MsgBox ("*INIT US-ARRAY DONE*")
End Sub

Sub Bouton7_Click()
    A = Range("D10:D10").number of elements in focus
    B = Range("D10:D10").velocity
    C = Range("D4:D4").number of element in the probe
    D = Range("D7:D7") * 1000 focusing depth
    E = Range("D8:D8") * 1000 pitch
    F = Range("D9:D9").probe frequency
    G = Range("C11:C11") * 1000 gain
    H = 1 'init b-scan

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