Arduino_Interface_2_state_sol..vi
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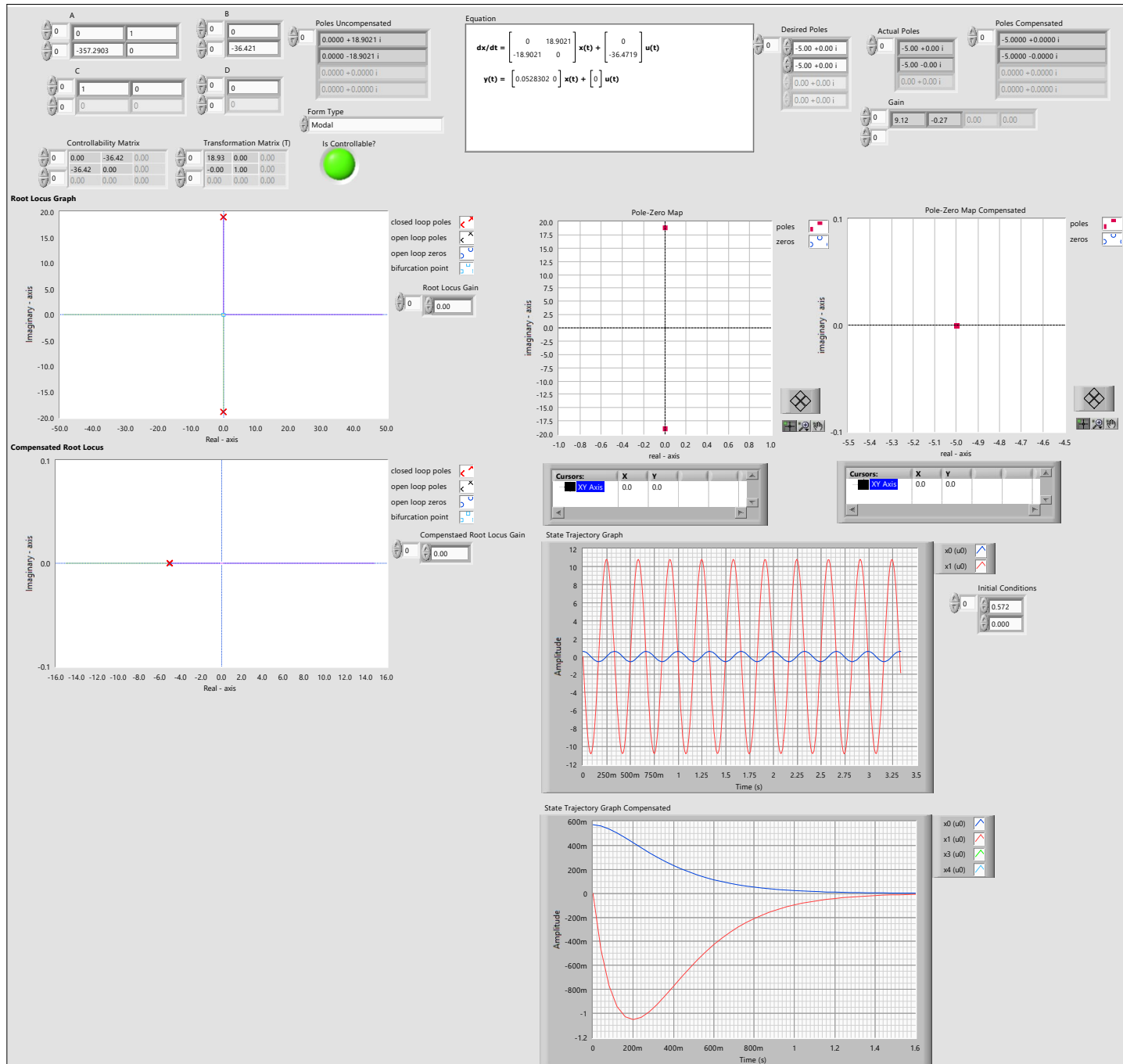
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A
0   0   1
0   -357.2903   0

B
0   0
0   -36.421

C
0   1   0
0   0   0

D
0   0
0   0

Poles Uncompensated
0   0.0000 +18.9021 i
     0.0000 -18.9021 i
     0.0000 +0.0000 i
     0.0000 +0.0000 i

Form Type
Modal

Controllability Matrix
0   0.00   -36.42   0.00
     -36.42   0.00   0.00
     0.00   0.00   0.00

Transformation Matrix (T)
0   18.93   0.00   0.00
0   -0.00   1.00   0.00
     0.00   0.00   0.00

Is Controllable?

Equation

$$\frac{dx}{dt} = \begin{bmatrix} 0 & 18.9021 \\ -18.9021 & 0 \end{bmatrix} x(t) + \begin{bmatrix} 0 \\ -36.4719 \end{bmatrix} u(t)$$

$$y(t) = \begin{bmatrix} 0.0528302 & 0 \end{bmatrix} x(t) + \begin{bmatrix} 0 \end{bmatrix} u(t)$$

Desired Poles
0   -5.00 +0.00 i
     -5.00 +0.00 i
     0.00 +0.00 i
     0.00 +0.00 i

Actual Poles
0   -5.00 +0.00 i
     -5.00 -0.00 i
     0.00 +0.00 i

Poles Compensated
0   -5.0000 +0.0000 i
     -5.0000 -0.0000 i
     0.0000 +0.0000 i
     0.0000 +0.0000 i

Gain
0   9.12   -0.27   0.00   0.00
0

Root Locus Graph

closed loop poles
open loop poles
open loop zeros
bifurcation point

Root Locus Gain
0   0.00

Pole-Zero Map

poles
zeros

Pole-Zero Map Compensated

poles
zeros

Compensated Root Locus

closed loop poles
open loop poles
open loop zeros
bifurcation point

Compensated Root Locus Gain
0   0.00

Cursors: X   Y
XY Axis   0.0   0.0

Cursors: X   Y
XY Axis   0.0   0.0

State Trajectory Graph

x0 (u0)
x1 (u0)

Initial Conditions
0   0.572
     0.000

State Trajectory Graph Compensated

x0 (u0)
x1 (u0)
x3 (u0)
x4 (u0)

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