

DSP startup

Magic & data initialization

AIC & ISR config.

Idle Loop / statemachine startup

Idle Loop: DSP as a state maschine

Cypress USB-2.0 Controller

Change in state variable occured?
then enable/disable tasks

DSP-DPORT-SRAM:
all state variables
and data/fifo buffers

Scan

Move

Probe

Slider

A. App.

CR. Puls

DSP data process ISR

75 kHz Timer

ADC in

Data Process Tasks

DAC out

Analog-810 subsystem:
driver for
ADC/DAC,
offset compensation

Data Process Tasks

all sub tasks are
non-blocking
and inde-
pendent.

FB ?

Feedback Lin/Log

Mov. ?

Offset Move

Puls ?

CoolRunner Puls/IO

Scan ?

Area Scan

VP ?

Vector Probe, LockIn

App. ?

Auto Approach

Slid. ?

Slider Waveform