

```
-> wr
2016/01/20 15:12:14.608 ASSERT  MLCX_IL_INITIALIZING
System Rebooting ...
Flushing stimulus log file MLCStimulus01344.mlcs1
Stopping hyper term log file HyperTerm00015.log
REBOOTING MLC
2016/01/20 15:12:16.013 A Taxi Status change
  from motor power enabled to head-to-controller link down
2016/01/20 15:12:16.013 B Taxi Status change
  from motor power enabled to head-to-controller link down
```

```
Press any key to stop auto-boot...
1
auto-booting...
```

```
boot device      : fei
unit number     : 0
processor number : 0
host name       : C
file name       : vxWorksLPC\vxWorks
inet on ethernet (e) : 172.20.20.20:0xffffffff00
host inet (h)    : 172.20.20.21
user (u)        : m5500
ftp password (pw) : user
flags (f)       : 0x8
target name (tn) : MLC
startup script (s) : startup.lpc
```

```
Loading... 1707504 + 336624
Starting at 0x308000...
```

```
Adding 6265 symbols for standalone.
```

VxWorks

```
Copyright 1984-2009 Wind River Systems, Inc.
```

```
      CPU: INTEL ATOM N270
Runtime Name: VxWorks
Runtime Version: 6.8
      BSP version: 7.5.0.47.5.0.4
      Created: Nov 10 2011, 17:52:20
ED&R Policy Mode: Deployed
      WDB Comm Type: WDB_COMM_END
      WDB: Ready.
```

```
Executing startup script 'startup.lpc'...
```

```
# Comment lines start with the # symbol
```

```
ld 1,0,"mlcxLPC.out"  
value = 71778320 = 0x4474010
```

```
# Disable or enable automatic Dynalog file generation  
# by commenting out or uncommenting the following line:  
# diagAutoDynalogs 1
```

```
# Uncomment the following line to put dose fraction  
# in first column for arc plans instead of gantry angle  
# diagUseRapidArcDynalogFormat
```

```
# Uncomment the following line to change the backlash  
# informational message reporting threshold during  
# initialization from the default value of 0.20  
# SetBacklashReportingThreshold "0.15"
```

```
# Start MLC software  
sp mlcStart  
Task spawned: id = 0x4474588, name = t1  
value = 71779720 = 0x4474588
```

```
# Start the EventLogging process  
sp logStart  
Task spawned: id = 0x45fa370, name = t2  
value = 73376624 = 0x45fa370 = 'p'
```

```
Done executing startup script 'startup.lpc'.
```

```
-> 2016/01/20 15:12:40.863
```

```
      Multileaf Collimator Controller Version 7.5.1.34  
      (Built on Jan 10 2013 at 20:13:47)  
      For the Varian Millennium 120 Leaf MLC running on a  
      Kontron ETXDC controller  
      (c) 1991-2013 Varian Medical Systems, Inc.
```

```
2016/01/20 15:12:41.263  
      MLC Serial Number = 2887  
      Clinac Model = 2100EX  
      Clinac Serial Number = 1647  
      Facility = Vassar Brothers Medical Center  
2016/01/20 15:12:41.263 FPGA Version = 7.5.0.12
```

```
2016/01/20 15:12:41.663 ASSERT  MLCX_IL_INITIALIZING  
2016/01/20 15:12:42.494 A Taxi Status change  
      from motor power disabled to motor power enabled  
2016/01/20 15:12:42.494 B Taxi Status change  
      from motor power disabled to motor power enabled
```

2016/01/20 15:12:42.039 Initializing Carriages
2016/01/20 15:12:46.592 Carriages Initialized
2016/01/20 15:12:46.592 Initializing Leaf Primaries
2016/01/20 15:12:46.993 Testing Primary vs. Secondary
2016/01/20 15:13:17.941 Move leaves to middle of their travel
2016/01/20 15:13:24.346 Moving out of beam
2016/01/20 15:13:29.996 Moving secondary bank 1 to beam
2016/01/20 15:13:35.700 Moving secondary bank 2 to beam
2016/01/20 15:13:41.550 Loaded alignment file TouchAlignM120.taln
Created on TUE JUL 21 17:45:35 2015
2016/01/20 15:13:43.808 Leaf 01 Initialized
2016/01/20 15:13:46.545 Leaf 02 Initialized
2016/01/20 15:13:48.354 Leaf 03 Initialized
2016/01/20 15:13:50.576 Leaf 04 Initialized
2016/01/20 15:13:54.005 Leaf 05 Initialized
2016/01/20 15:13:56.066 Leaf 06 Initialized
2016/01/20 15:13:58.691 Leaf 07 Initialized
2016/01/20 15:14:01.210 Leaf 08 Initialized
2016/01/20 15:14:03.131 Leaf 09 Initialized
2016/01/20 15:14:05.198 Leaf 10 Initialized
2016/01/20 15:14:07.478 Leaf 11 Initialized
2016/01/20 15:14:09.730 Leaf 12 Initialized
2016/01/20 15:14:11.997 Leaf 13 Initialized
2016/01/20 15:14:14.097 Leaf 14 Initialized
2016/01/20 15:14:16.150 Leaf 15 Initialized
2016/01/20 15:14:18.245 Leaf 16 Initialized
2016/01/20 15:14:20.423 Leaf 17 Initialized
2016/01/20 15:14:22.360 Leaf 18 Initialized
2016/01/20 15:14:24.458 Leaf 19 Initialized
2016/01/20 15:14:26.739 Leaf 20 Initialized
2016/01/20 15:14:28.810 Leaf 21 Initialized
2016/01/20 15:14:31.690 Leaf 22 Initialized
2016/01/20 15:14:33.922 Leaf 23 Initialized
2016/01/20 15:14:36.161 Leaf 24 Initialized
2016/01/20 15:14:38.280 Leaf 25 Initialized
2016/01/20 15:14:45.222 Leaf 26 Initialized
2016/01/20 15:14:47.297 Leaf 27 Initialized
2016/01/20 15:14:49.639 Leaf 28 Initialized
2016/01/20 15:14:51.811 Leaf 29 Initialized
2016/01/20 15:14:54.112 Leaf 30 Initialized
2016/01/20 15:14:56.189 Leaf 31 Initialized
2016/01/20 15:14:59.958 Leaf 32 Initialized
2016/01/20 15:15:02.120 Leaf 33 Initialized
2016/01/20 15:15:04.434 Leaf 34 Initialized
2016/01/20 15:15:06.602 Leaf 35 Initialized
2016/01/20 15:15:09.305 Leaf 36 Initialized
2016/01/20 15:15:11.619 Leaf 37 Initialized
2016/01/20 15:15:13.716 Leaf 38 Initialized
2016/01/20 15:15:15.881 Leaf 39 Initialized
2016/01/20 15:15:18.722 Leaf 40 Initialized
2016/01/20 15:15:21.163 Leaf 41 Initialized
2016/01/20 15:15:23.237 Leaf 42 Initialized

```

2016/01/20 15:15:25.768 Leaf 43 Initialized
2016/01/20 15:15:27.989 Leaf 44 Initialized
2016/01/20 15:15:30.331 Leaf 45 Initialized
2016/01/20 15:15:32.298 Leaf 46 Initialized
2016/01/20 15:15:34.657 Leaf 47 Initialized
2016/01/20 15:15:36.789 Leaf 48 Initialized
2016/01/20 15:15:38.902 Leaf 49 Initialized
2016/01/20 15:15:41.068 Leaf 50 Initialized
2016/01/20 15:15:43.194 Leaf 51 Initialized
2016/01/20 15:15:44.888 Leaf 52 Initialized
2016/01/20 15:15:47.681 Leaf 53 Initialized
2016/01/20 15:15:49.457 Leaf 54 Initialized
2016/01/20 15:15:51.310 Leaf 55 Initialized
2016/01/20 15:15:53.449 Leaf 56 Initialized
2016/01/20 15:15:55.717 Leaf 57 Initialized
2016/01/20 15:15:58.445 Leaf 58 Initialized
2016/01/20 15:16:00.604 Leaf 59 Initialized
2016/01/20 15:16:03.671 Leaf 60 Initialized
2016/01/20 15:16:03.671 Leaf Primaries Initialized

```

Touch Test Results:

Leaf Gaps in mm (+ = gap | - = overlap)

Half of the gap is applied to each leaf:

	1	2	3	4	5	6	7	8	9	10
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
=====	-0.16	-0.16	-0.16	-0.14	-0.15	-0.12	-0.02	-0.10	-0.13	-0.14
	-0.15	-0.14	-0.15	-0.13	-0.14	-0.15	-0.14	-0.05	-0.14	-0.13
	-0.13	-0.12	-0.14	-0.12	-0.10	-0.07	-0.13	-0.13	-0.12	-0.11
	-0.12	-0.06	-0.11	-0.06	-0.11	-0.11	-0.11	-0.11	-0.11	-0.11
	-0.10	-0.11	-0.11	-0.11	-0.12	-0.11	-0.11	-0.11	-0.10	-0.05
	-0.13	-0.09	-0.10	-0.08	-0.10	-0.10	-0.08	-0.07	-0.10	-0.10

Minimum gap -0.16 (Leaf 01)

Maximum gap -0.02 (Leaf 07)

Average gap -0.11

```

2016/01/20 15:16:33.863 Touch Test Completed
2016/01/20 15:16:33.863 Calibrating Secondaries
2016/01/20 15:16:48.327 Testing Secondaries
2016/01/20 15:16:56.424 Secondaries Initialized
2016/01/20 15:16:56.803 MLC initialized successfully
2016/01/20 15:16:56.803 release MLCX_IL_INITIALIZING
2016/01/20 15:16:56.803 MLC ready for treatment

```