**Command Line:** 

pulse-desktop-cpp Tue Mar 26 16:34:02 2013 Date:

28482.10 mcycles Raw run time:

Total calls: 9258 rdtsc overhead: 35 cycles Per call overhead: 70 cycles
Estimated overhead: 0.6484 mcycles

| Function                               | Calls                        | s MCycles Avg                |            | Self MCycles | Self Avg |
|--|------------------------------|------------------------------|------------|--------------|----------|
| /Main                                  | 1 26198.4978 (100%) 26198.49 |                              | 26198.4978 | 233.9525     | 233.9525 |
| i∃loop                                 | 302                          | 802 25964.5453 (99%) 85.9753 |            | 1.7767       | 0.0059   |
| wait key                               | 301                          | 12363.3849 ( 47%)            | 41.0744    | 12363.3849   | 41.0744  |
| void Window::update()                  | 301                          | 11412.7939 ( 44%)            | 37.9163    | 1.2515       | 0.0042   |
| void Pulse::onFrame()                  | 301                          | 9042.7736 ( 35%)             | 30.0424    | 1.1990       | 0.0040   |
| equal or more boxes than faces         | 301                          | 6080.1116 ( 23%)             | 20.1997    | 2.2855       | 0.0076   |
| void Pulse::onFace()                   | 301                          | 6076.7600 ( 23%)             | 20.1886    | 3.9544       | 0.0131   |
| void EvmGdownIIR::onFrame()            | 301                          | 3638.0518 ( 14%)             | 12.0866    | 1.4819       | 0.0049   |
| convert to 8 bit                       | 300                          | 1607.4122 ( 6%)              | 5.3580     | 1607.4122    | 5.3580   |
| pyrUp                                  | 300                          | 583.2825 ( 2%)               | 1.9443     | 583.2825     | 1.9443   |
| convert to float                       | 301                          | 561.4179 ( 2%)               | 1.8652     | 561.4179     | 1.8652   |
| pyrDown                                | 301                          | 510.0373 ( 2%)               | 1.6945     | 510.0373     | 1.6945   |
| add back to original frame             | 300                          | 361.6961 ( 1%)               | 1.2057     | 361.6961     | 1.2057   |
| temporal filter                        | 300                          | 11.8974 ( 0%)                | 0.0397     | 11.8974      | 0.0397   |
| amplify                                | 300                          | 0.7884 ( 0%)                 | 0.0026     | 0.7884       | 0.0026   |
| first                                  | 1                            | 0.0381 ( 0%)                 | 0.0381     | 0.0381       | 0.0381   |
| void cv::detrend()                     | 301                          | 1552.5092 ( 6%)              | 5.1578     | 1552.5092    | 5.1578   |
| resize and draw face box back to frame | 301                          | 430.7046 ( 2%)               | 1.4309     | 430.7046     | 1.4309   |
| resize face box                        | 301                          | 307.4483 ( 1%)               | 1.0214     | 307.4483     | 1.0214   |
| drawing                                | 301                          | 95.1404 ( 0%)                | 0.3161     | 95.1404      | 0.3161   |
| void cv::meanFilter()                  | 301                          | 32.0769 ( 0%)                | 0.1066     | 32.0769      | 0.1066   |
| push back raw and timestamp            | 301                          | 9.1591 ( 0%)                 | 0.0304     | 9.1591       | 0.0304   |
| void cv::normalization()               | 301                          | 5.1992 ( 0%)                 | 0.0173     | 5.1992       | 0.0173   |
| shift raw and timestamp                | 201                          | 1.9278 ( 0%)                 | 0.0096     | 1.9278       | 0.0096   |
| bpm                                    | 10                           | 0.5883 ( 0%)                 | 0.0588     | 0.5883       | 0.0588   |
| void Pulse::Face::updateBox()          | 301                          | 0.9015 ( 0%)                 | 0.0030     | 0.8720       | 0.0029   |
| void cv::interpolate()                 | 301                          | 0.0295 ( 0%)                 | 0.0001     | 0.0295       | 0.0001   |
| int Pulse::Face::nearestBox()          | 300                          | 0.1646 ( 0%)                 | 0.0005     | 0.1646       | 0.0005   |
| detect faces                           | 301                          | 2961.4630 ( 11%)             | 9.8387     | 2961.4630    | 9.8387   |
| imshow                                 | 301                          | 2362.7211 ( 9%)              | 7.8496     | 2362.7211    | 7.8496   |
| void Window::drawFps()                 | 301                          | 6.0477 ( 0%)                 | 0.0201     | 0.4610       | 0.0015   |
| fps drawing                            | 301                          | 5.3400 ( 0%)                 | 0.0177     | 5.3400       | 0.0177   |
| bool Window::Fps::update()             | 301                          | 0.1247 ( 0%)                 | 0.0004     | 0.1096       | 0.0004   |
| fps tick                               | 10                           | 0.0151 ( 0%)                 | 0.0015     | 0.0151       | 0.0015   |
| fps string                             | 10                           | 0.1219 ( 0%)                 | 0.0122     | 0.1219       | 0.0122   |
| capture                                | 302                          | 2186.5898 ( 8%)              | 7.2404     | 2186.5898    | 7.2404   |

| Function                               | Calls | Self MCycles     | Self Avg |  |  |  |
|--|-------|------------------|----------|--|--|--|
| * Functions sorted by self time        |       |                  |          |  |  |  |
| wait key                               | 301   | 12363.3849 (47%) | 41.0744  |  |  |  |
| detect faces                           | 301   | 2961.4630 (11%)  | 9.8387   |  |  |  |
| imshow                                 | 301   | 2362.7211 (9%)   | 7.8496   |  |  |  |
| _capture                               | 302   | 2186.5898 (8%)   | 7.2404   |  |  |  |
| convert to 8 bit                       | 300   | 1607.4122 (6%)   | 5.3580   |  |  |  |
| void cv::detrend()                     | 301   | 1552.5092 (6%)   | 5.1578   |  |  |  |
| pyrUp                                  | 300   | 583.2825 (2%)    | 1.9443   |  |  |  |
| convert to float                       | 301   | 561.4179 (2%)    | 1.8652   |  |  |  |
| pyrDown                                | 301   | 510.0373 (2%)    | 1.6945   |  |  |  |
| resize and draw face box back to frame | 301   | 430.7046 (2%)    | 1.4309   |  |  |  |
| add back to original frame             | 300   | 361.6961 (1%)    | 1.2057   |  |  |  |
| resize face box                        | 301   | 307.4483 (1%)    | 1.0214   |  |  |  |
| /Main                                  | 1     | 233.9525 (1%)    | 233.9525 |  |  |  |
| drawing                                | 301   | 95.1404 (0%)     | 0.3161   |  |  |  |
| void cv::meanFilter()                  | 301   | 32.0769 (0%)     | 0.1066   |  |  |  |
| temporal filter                        | 300   | 11.8974 (0%)     | 0.0397   |  |  |  |
| push back raw and timestamp            | 301   | 9.1591 (0%)      | 0.0304   |  |  |  |
| fps drawing                            | 301   | 5.3400 (0%)      | 0.0177   |  |  |  |
| void cv::normalization()               | 301   | 5.1992 (0%)      | 0.0173   |  |  |  |
| void Pulse::onFace()                   | 301   | 3.9544 (0%)      | 0.0131   |  |  |  |
| equal or more boxes than faces         | 301   | 2.2855 (0%)      | 0.0076   |  |  |  |
| shift raw and timestamp                | 201   | 1.9278 (0%)      | 0.0096   |  |  |  |
| loop                                   | 302   | 1.7767 (0%)      | 0.0059   |  |  |  |
| void EvmGdownIIR::onFrame()            | 301   | 1.4819 (0%)      | 0.0049   |  |  |  |
| void Window::update()                  | 301   | 1.2515 (0%)      | 0.0042   |  |  |  |
| void Pulse::onFrame()                  | 301   | 1.1990 (0%)      | 0.0040   |  |  |  |
| void Pulse::Face::updateBox()          | 301   | 0.8720 (0%)      | 0.0029   |  |  |  |
| amplify                                | 300   | 0.7884 (0%)      | 0.0026   |  |  |  |
| _bpm                                   | 10    | 0.5883 (0%)      | 0.0588   |  |  |  |
| void Window::drawFps()                 | 301   | 0.4610 (0%)      | 0.0015   |  |  |  |
| int Pulse::Face::nearestBox()          | 300   | 0.1646 (0%)      | 0.0005   |  |  |  |
| fps string                             | 10    | 0.1219 (0%)      | 0.0122   |  |  |  |
| bool Window::Fps::update()             | 301   | 0.1096 (0%)      | 0.0004   |  |  |  |
| first                                  | 1     | 0.0381 (0%)      | 0.0381   |  |  |  |
| void cv::interpolate()                 | 301   | 0.0295 (0%)      | 0.0001   |  |  |  |
| fps tick                               | 10    | 0.0151 (0%)      | 0.0015   |  |  |  |