

```

#include <NIDAQmx.h>

#include <iostream>
#include <string>

void HandleError(TaskHandle handle)
{
    char errBuff[2048] = { '\0' };
    DAQmxGetExtendedErrorInfo(errBuff, 2048);

    std::cout << "Error " << std::string(errBuff) << std::endl;

    system("PAUSE");

    if (handle)
    {
        DAQmxStopTask(handle);
        DAQmxClearTask(handle);
    }

    exit(EXIT_FAILURE);
}

int main(int argc, char *argv[])
{
    int32 returnvalue = 0;

    TaskHandle taskHandle = nullptr;

    const int noOfChannels = 4;
    float64 data[noOfChannels];
    std::string chIDs[noOfChannels] = { "ai1", "ai5", "ai9", "ai13" }; //
    physikal names of the ports

    // DAQmx analog voltage channel and timing parameters

    returnvalue = DAQmxCreateTask("TestName", &taskHandle);

    if (DAQmxFailed(returnvalue))
        HandleError(taskHandle);

    for (int i = 0; i < noOfChannels; ++i)
    {
        returnvalue = DAQmxCreateAIVoltageChan(taskHandle, ("Dev1/" +
chIDs[i]).c_str(), "", DAQmx_Val_NRSE, -10.0, 10.0, DAQmx_Val_Volts, NULL);
        if (DAQmxFailed(returnvalue))
            HandleError(taskHandle);
    }

    returnvalue = DAQmxCfgSampClkTiming(taskHandle, "", 1.0, DAQmx_Val_Rising,
DAQmx_Val_ContSamps, 1); // continuous measurement with 1 Hz

    if (DAQmxFailed(returnvalue))
        HandleError(taskHandle);

    // DAQmx Start Code

    returnvalue = DAQmxStartTask(taskHandle);

    if (DAQmxFailed(returnvalue))

```

```

        HandleError(taskHandle);

// DAQmx Read Code
int32      read;

while (true)
{
    // Read data
    returnvalue = DAQmxReadAnalogF64(taskHandle, 1, 10.0,
DAQmx_Val_GroupByChannel, data, noOfChannels, &read, NULL);

    if (DAQmxFailed(returnvalue))
        HandleError(taskHandle);

    std::cout << std::endl;

    for (int i = 0; i < noOfChannels; ++i)
    {
        std::cout << "Ch " << chIDs[i] << ": " << data[i] <<
std::endl;
    }

}

// Stop and clear task
DAQmxStopTask(taskHandle);
DAQmxClearTask(taskHandle);

system("PAUSE");
return EXIT_SUCCESS;
}

```