```
auto gain = 1.0f;




void processSensorData (float* sensorInOut, int n)
{
    // do some dsp
    ...

    register auto gain_copy = gain;
    for (int i = 0; i < n; ++i)
        sensorInOut[i] *= gain_copy;
}

// called on another thread
void setSensorGain (float newGain)
{
    gain = newGain;
}
```

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```
auto gain = 1.0f;
```

```
void processSensorData (float* sensorInOut, int n)
{
    // do some dsp
    ...

    register auto gain_copy = gain;
    for (int i = 0; i < n; ++i)
        sensorInOut[i] *= gain_copy;
}

// called on another thread
void setSensorGain (float newGain)
{
    gain = newGain;
}
```

```
auto gain = 1.0f;

void realtimeThreadEntry()
{
    while (rocketFlying)
    {
        ...
        processSensorData (sensorData, 512);
    }
}

void processSensorData (float* sensorInOut, int n)
{
    // do some dsp ...

    for (int i = 0; i < n; ++i)
        sensorInOut[i] *= gain;
}

// called on another thread
void setSensorGain (float newGain)
{
    gain = newGain;
}
```