

Example for GetRotateTransform function.

```
IppStatus RotateExample_8u_C3R(Ipp8u* pSrc, IppiSize srcSize, Ipp32s srcStep, Ipp8u*
pDst, IppiSize dstSize,
    Ipp32s dstStep, double angle, double xShift, double yShift)
{
    IppiWarpSpec* pSpec = 0;
    double coeffs[2][3];
    int specSize = 0, initSize = 0, bufSize = 0;
    Ipp8u* pBuffer = 0;
    const Ipp32u numChannels = 3;
    IppiPoint dstOffset = {0, 0};
    IppStatus status = ippStsNoErr;
    IppiBorderType borderType = ippBorderConst;
    IppiWarpDirection direction = ippWarpForward;
    Ipp64f pBorderValue[numChannels];

    status = ippiGetRotateTransform (angle, xShift, yShift, coeffs);
    if (status < ippStsNoErr) return status;

    for (int i = 0; i < numChannels; ++i) pBorderValue[i] = 255.0;

    /* Spec and init buffer sizes */
    status = ippiWarpAffineGetSize(srcSize, dstSize, ipp8u, coeffs, ippLinear, direction,
borderType,
        &specSize, &initSize);

    if (status < ippStsNoErr) return status;

    /* Memory allocation */
    pSpec = (IppiWarpSpec*)ippsMalloc_8u(specSize);

    if (pSpec == NULL)
    {
        return ippStsNoMemErr;
    }

    /* Filter initialization */
    status = ippiWarpAffineLinearInit(srcSize, dstSize, ipp8u, coeffs, direction,
numChannels, borderType, pBorderValue, 0, pSpec);

    if (status < ippStsNoErr)
    {
        ippsFree(pSpec);
        return status;
    }

    /* work buffer size */
    status = ippiWarpGetBufferSize(pSpec, dstSize, &bufSize);
    if (status < ippStsNoErr)
    {
        ippsFree(pSpec);
        return status;
    }

    pBuffer = ippsMalloc_8u(bufSize);
    if (pBuffer == NULL)
    {
        ippsFree(pSpec);
        return ippStsNoMemErr;
    }

    /* Resize processing */
    status = ippiWarpAffineLinear_8u_C3R(pSrc, srcStep, pDst, dstStep, dstOffset,
dstSize, pSpec, pBuffer);
}
```

```
    ippFree(pSpec);  
    ippFree(pBuffer);  
    return status;  
}
```