

```

static Int32 MultiplexedSineTable[NUM_SINE_SAMPLES][NUM_OUT_CHANNELS];
static Int32 SineTable[NUM_SINE_SAMPLES] =
{
    // 1kHz sampled at 48 kHz sample rate - 48 samples.
    0x00000000, 0x10B5150F, 0x2120FB82, 0x30FBC54C, 0x3FFFFFFF, 0x4DEBE4FD, 0x5A827999, 0x658C9A2C,
    0x6ED9EBA0, 0x7641AF3B, 0x7BA3751C, 0x7EE7AA4A, 0x7FFFFFFF, 0x7EE7AA4A, 0x7BA3751C, 0x7641AF3B,
    0x6ED9EBA0, 0x658C9A2C, 0x5A827999, 0x4DEBE4FD, 0x3FFFFFFF, 0x30FBC54C, 0x2120FB82, 0x10B5150F,
    0x00000000, 0xEF4AEAF1, 0xDEDF047E, 0xCF043AB3, 0xC0000001, 0xB2141B03, 0xA57D8667, 0x9A7365D4,
    0x91261460, 0x89BE50C5, 0x845C8AE4, 0x811855B6, 0x80000001, 0x811855B6, 0x845C8AE4, 0x89BE50C5,
    0x91261460, 0x9A7365D4, 0xA57D8667, 0xB2141B03, 0xC0000001, 0xCF043AB4, 0xDEDF047E, 0xEF4AEAF1
};
static Int32 DivideTable[NUM_OUT_CHANNELS] = {1,3,5,7,9,2,4,6,8,10};

void MakeMultiplexedSineTable(void)
{
    Uint32 ChannelIdx;
    Uint32 SampleIdx;

    for (SampleIdx = 0; NUM_SINE_SAMPLES > SampleIdx; SampleIdx++)
    {
        for (ChannelIdx = 0; NUM_OUT_CHANNELS > ChannelIdx; ChannelIdx++)
        {
            MultiplexedSineTable[SampleIdx][ChannelIdx] = SineTable[SampleIdx]/DivideTable[ChannelIdx];
        }
    }
}

void McBSP1AudioTxIsr (void)
{
    static Uint32 ChannelIdx = 0;
    static Uint32 SampleIdx = 0;

    MCBSP1_DXR_32BIT = MultiplexedSineTable[SampleIdx][ChannelIdx++];
    if (NUM_OUT_CHANNELS <= ChannelIdx)
    {
        ChannelIdx = 0;
        if (NUM_SINE_SAMPLES <= ++SampleIdx) SampleIdx = 0;
    }
}

```

