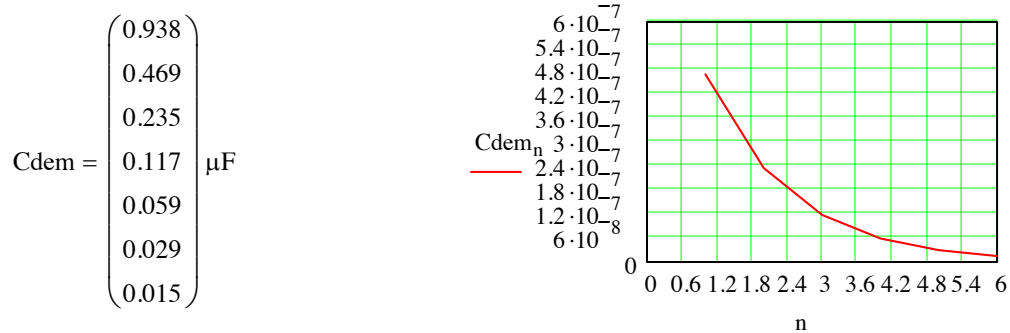


bit := 16	number of DAC bits (TDA1541A=16 TDA1540 = 14)
Iref := 2·mA	current DAC reference
VdvCmsb := 7.5·V	voltage across Cmsb (TDA1541A=7.5V TDA1540 = 10.5V)
wc_percent := 11.9·%	worst case %
Fdem := 176.4·KHz	DEM frequency
DEMbits := 7	number of DEM bits (TDA1541A=7 TDA1540 = 10)

$\text{Bit} := \left[\frac{1}{2^{(\text{bit}+1)}} \right]$	$\text{Bit} = 7.629 \times 10^{-6}$	bit constant
$\text{Iwc} := \left(\frac{\text{Iref}}{4} \right) \cdot \text{wc_percent}$	$\text{Iwc} = 59.5 \mu\text{A}$	worst case p-p ripplea current for given %
$\text{Vwc} := \text{Bit} \cdot \text{VdvCmsb}$	$\text{Vwc} = 5.722 \times 10^{-5} \text{V}$	
$\text{Zwc} := \frac{\text{Vwc}}{\text{Iwc}}$	$\text{Zwc} = 0.962 \Omega$	
$\omega_{\text{dem}} := 2 \cdot \pi \cdot \text{Fdem}$		
$\text{Cmsb} := \frac{1}{\omega_{\text{dem}} \cdot \text{Zwc}}$	$\text{Cmsb} = 0.938 \mu\text{F}$	
$\text{Cdem}_0 := \text{Cmsb}$		
$\text{n} := 1 \dots (\text{DEMbits} - 1)$		
$\text{Cdem}_n := \frac{\text{Cmsb}}{2^n}$		



Cmsb = 2 x 680 nF	demFo=176.4KHz	17.3%	Zwc=0.662 Ω
Cmsb = 2 x 470 nF	demFo=176.4KHz	11.9%	Zwc=0.962 Ω