

```

1  % same as dftinterp except that this is for the case of p < n
2  function xp=dftinterp_down(inter,x,p)
3      n = length(x);
4
5      c=inter(1); d=inter(2);
6
7      y=fft(x);                % apply DFT
8      yp=zeros(p,1);          % yp will hold coefficients for ifft
9
10     % move the first p/2 frequencies from y to yp
11     yp(1:floor(p/2)+1) = y(1:floor(p/2)+1);
12
13     % move the last p/2 frequencies from y to yp
14     yp(floor(p/2)+2:p)= y(n-floor(p/2)+2:n); % same for upper tier
15
16     xp = real(ifft(yp))*(p/n); % invert fft to recover data
17
18

```