Carrier and Pilot Allocation
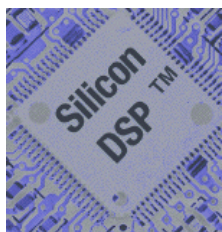
Silicon DSP Corporation

16.6 MHz

-26   -21   -7   0   7   21   26
       Pilot   Pilot   DC   Pilot   Pilot

       1   1   1   -1

Δf=312.5 kHz
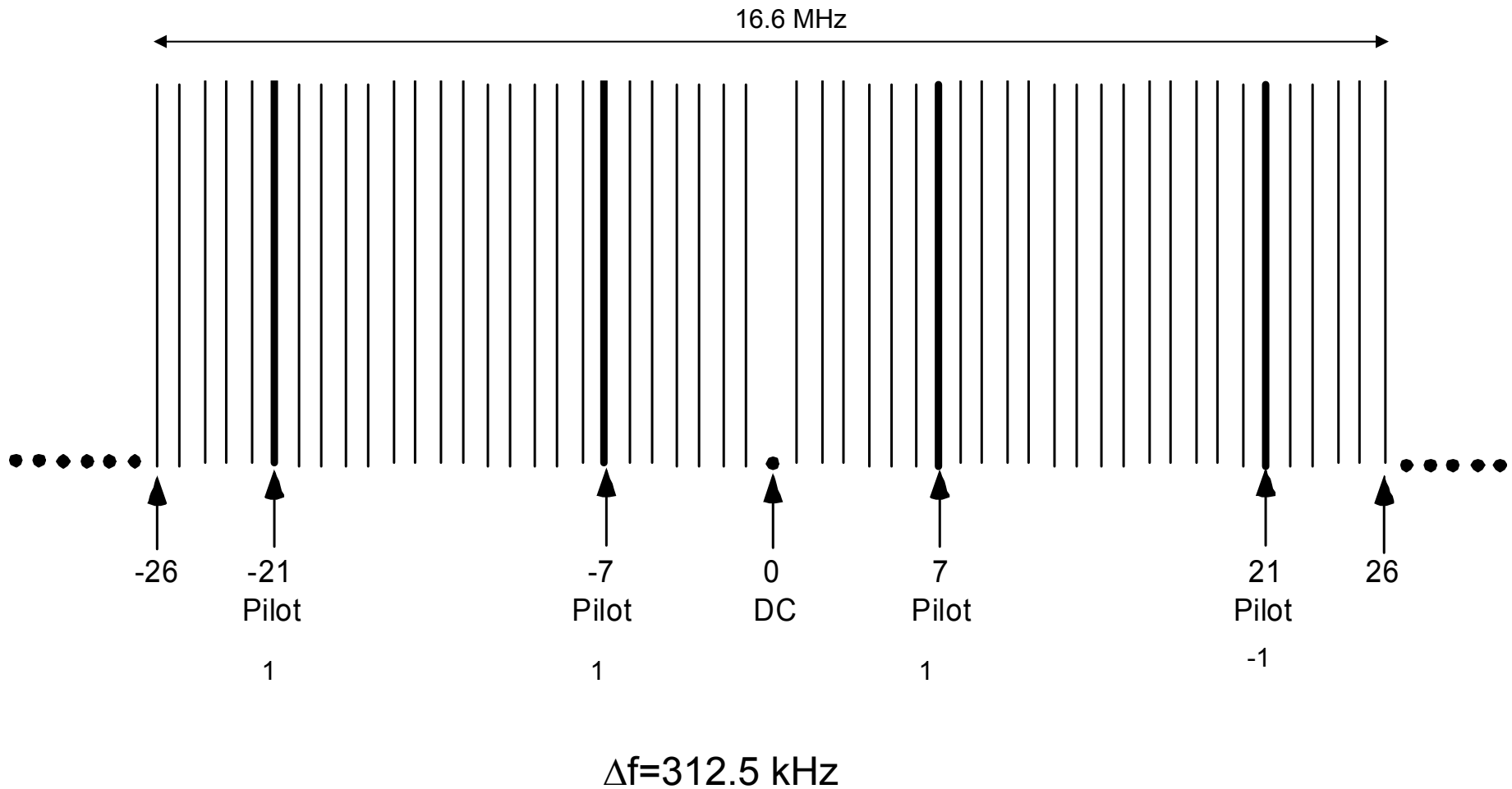
Transmit Spectrum Mask
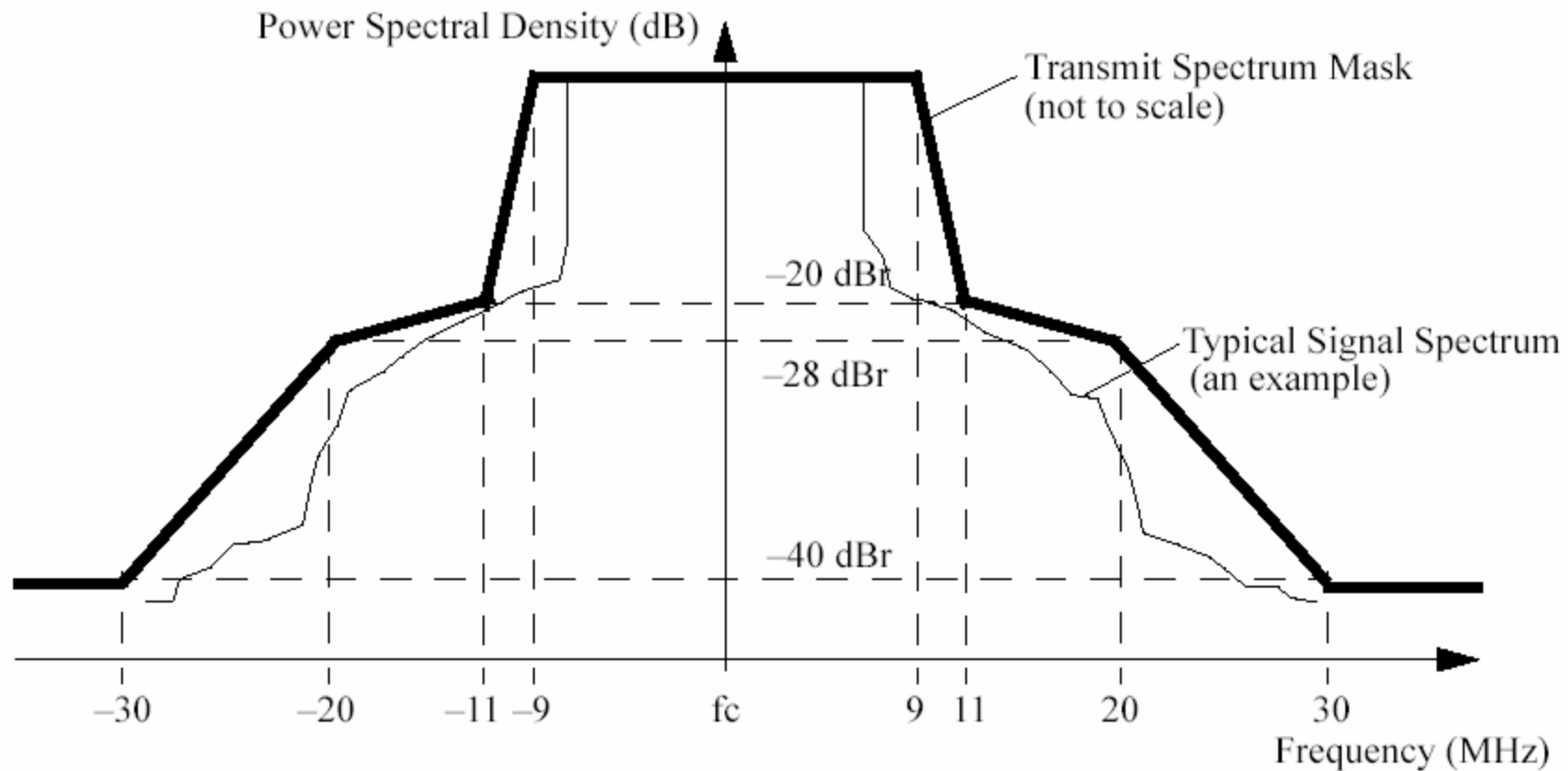
Figure 120—Transmit spectrum mask

16.6 MHz

-26   -21   -7   0   7   21   26
       Pilot   Pilot   DC   Pilot   Pilot
       1   1   1   -1

Δf=312.5 kHz

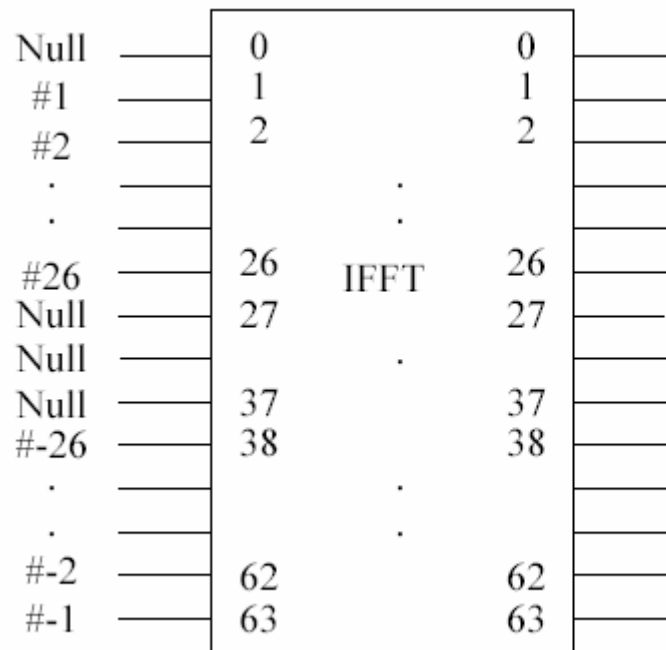| Null | 0 | | 0 | |
#1	1		1	
#2	2		2	
.		.		
.		.		
#26	26	IFFT	26	
Null	27		27	
Null		.		
Null	37		37	
#-26	38		38	
.		.		
.		.		
#-2	62		62	
#-1	63		63	
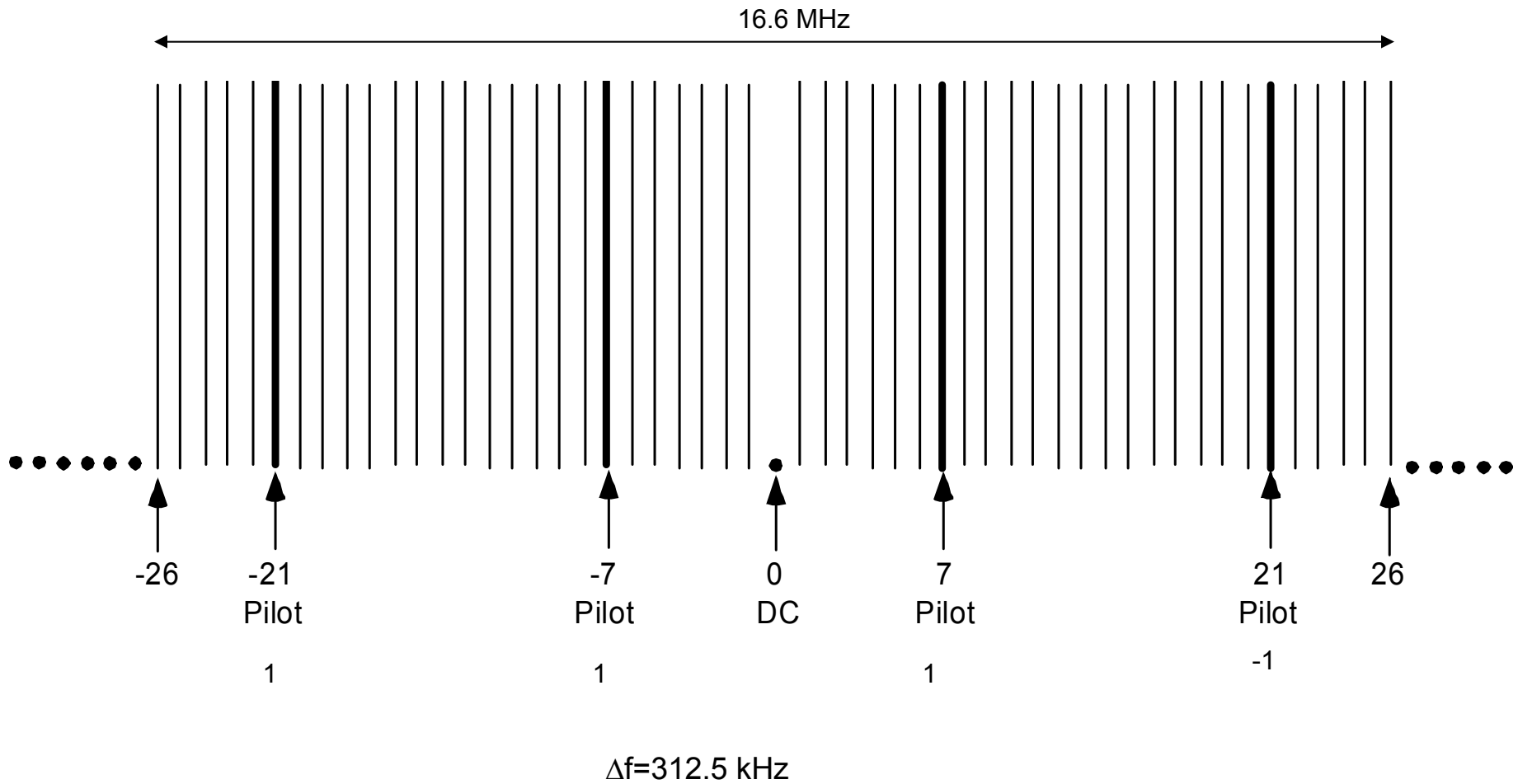
Time Domain Outputs
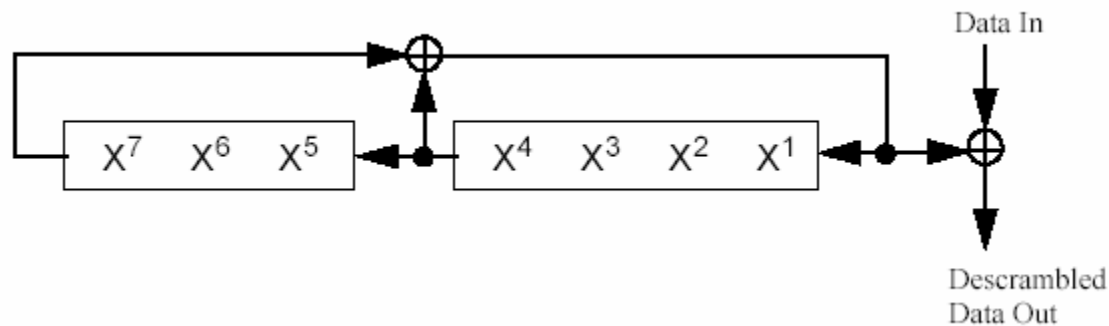
Pseudo Random Sequence

Applied to SIGNAL

Symbol Pilots

Applied to 15th OFDM Symbol after Signal Field

$p_{0..126v} =$ {1,1,1,1, -1,-1,-1,1, -1,-1,-1,-1, 1,1,-1,1, -1,-1,1,1, -1,1,1,-1, 1,1,1,1, 1,1,-1,1,
1,1,-1,1, 1,-1,-1,1, 1,1,-1,1, -1,-1,-1,1, -1,1,-1,-1, 1,-1,-1,1, 1,1,1,1, -1,-1,1,1,
-1,-1,1,-1, 1,-1,1,1, -1,-1,-1,1, 1,-1,-1,-1, -1,1,-1,-1, 1,-1,1,1, 1,1,-1,1, -1,1,-1,1,
-1,-1,-1,-1, -1,1,-1,1, 1,-1,1,-1, 1,1,1,-1, -1,1,-1,-1, -1,1,1,1, -1,-1,-1,-1, -1,-1,-1}

p$_0$ p$_1$ p$_2$ p$_k$

Signal	Data	Data	· · ·	Data
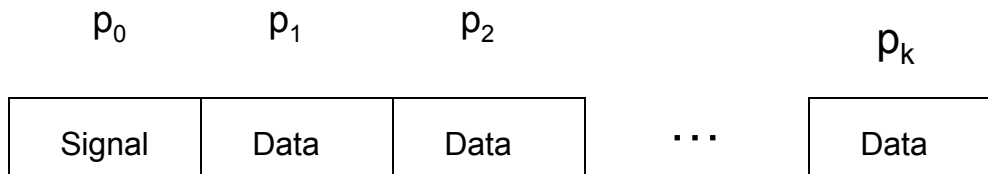
$$p_{0..126v} = \{1,1,1,1,\ -1,-1,-1,1,\ -1,-1,-1,-1,\ 1,1,-1,1,\ -1,-1,1,1,\ -1,1,1,-1,\ 1,1,1,1,\ 1,1,-1,1,$$
$$1,1,-1,1,\ 1,-1,-1,1,\ 1,1,-1,1,\ -1,-1,-1,1,\ -1,1,-1,-1,\ 1,-1,-1,1,\ 1,1,1,1,\ -1,-1,1,1,$$
$$-1,-1,1,-1,\ 1,-1,1,1,\ -1,-1,-1,1,\ 1,-1,-1,-1,\ -1,1,-1,-1,\ 1,-1,1,1,\ 1,1,-1,1,\ -1,1,-1,1,$$
$$-1,-1,-1,-1,\ -1,1,-1,1,\ 1,-1,1,-1,\ 1,1,1,-1,\ -1,1,-1,-1,\ -1,1,1,1,\ -1,-1,-1,-1,\ -1,-1,-1\}$$

Initialize state to all 1's

Set 0 to 1 and 1 to -1.