

primitive polynomial to generate field with 16 elements:  $x^4+x^3+1$

$0=0, 1=1, 2=x, 3=x+1, 4=x^2, 5=x^2+1, 6=x^2+x, \text{ etc, } 12=x^3+x^2, \dots, 15=x^3+x^2+x+1$

0 0 1  
0 1 0  
1 0 0  
0 1 4  
1 4 0  
0 1 6  
1 6 0  
1 0 4  
1 0 6  
0 1 5  
1 5 0  
0 1 15  
1 15 0  
1 0 5  
1 0 15  
1 1 2  
1 2 1  
1 12 12  
1 1 3  
1 3 1  
1 8 8  
1 1 5  
1 5 1  
1 15 15  
1 1 7  
1 7 1  
1 14 14  
1 1 8  
1 8 1  
1 3 3  
1 1 9  
1 9 1  
1 13 13  
1 1 10  
1 10 1  
1 11 11  
1 2 3  
1 13 12  
1 3 2  
1 9 8  
1 12 13  
1 8 9  
1 2 4

1 2 12  
1 4 2  
1 12 6  
1 12 2  
1 6 12  
1 2 7  
1 15 12  
1 7 2  
1 5 14  
1 12 15  
1 14 5  
1 2 8  
1 4 12  
1 8 2  
1 6 3  
1 12 4  
1 3 6  
1 2 10  
1 5 12  
1 10 2  
1 15 11  
1 12 5  
1 11 15  
1 2 14  
1 7 12  
1 14 2  
1 14 7  
1 12 7  
1 7 14  
1 2 15  
1 11 12  
1 15 2  
1 10 5  
1 12 11  
1 5 10  
1 3 4  
1 11 8  
1 4 3  
1 10 6  
1 8 11  
1 6 10  
1 3 7  
1 10 8  
1 7 3  
1 11 14  
1 8 10  
1 14 11

1 3 9  
1 7 8  
1 9 3  
1 14 13  
1 8 7  
1 13 14  
1 3 10  
1 6 8  
1 10 3  
1 4 11  
1 8 6  
1 11 4  
1 3 11  
1 14 8  
1 11 3  
1 7 10  
1 8 14  
1 10 7  
1 4 6  
1 13 6  
1 6 4  
1 9 4  
1 6 13  
1 4 9  
1 4 14  
1 15 6  
1 14 4  
1 5 7  
1 6 15  
1 7 5  
1 4 15  
1 9 6  
1 15 4  
1 13 5  
1 6 9  
1 5 13  
1 5 9  
1 10 15  
1 9 5  
1 11 13  
1 15 10  
1 13 11  
1 5 11  
1 13 15  
1 11 5  
1 9 10  
1 15 13

1 10 9  
1 7 13  
1 9 14  
1 13 7  
1 13 9  
1 14 9  
1 9 13