CONVERTITORE BCD SETTE SEGMENTI

INGRESSI				USCITE						
A	B	C	D	a	b	c	d	e	f	g
0	0	0	0	1	1	1	1	1	1	0
0	0	0	1	0	1	1	0	0	0	0
0	0	1	0	1	1	0	1	1	0	1
0	0	1	1	1	1	1	1	0	0	1
0	1	0	0	0	1	1	0	0	1	1
0	1	0	1	1	0	1	1	0	1	1
0	1	1	0	1	0	1	1	1	1	1
0	1	1	1	1	1	1	0	0	0	0
1	0	0	0	1	1	1	1	1	1	1
1	0	0	1	1	1	1	1	0	1	1
1	0	1	0	X	X	X	X	X	X	X
1	0	1	1	X	X	X	X	X	X	X
1	1	0	0	X	X	X	X	X	X	X
1	1	0	1	X	X	X	X	X	X	X
1	1	1	0	X	X	X	X	X	X	X
1	1	1	1	X	X	X	X	X	X	X

Uscita a

AB / CD	00	01	11	10	
00	1	0	X	1	
01	0	1	X	1	$a = C + A + BD + \bar{B}\bar{D}$
11	1	1	X	X	
10	1	1	X	X	

Uscita b

AB / CD	00	01	11	10	
00	1	1	X	1	
01	1	0	X	1	$b = \bar{B} + CD + \bar{C}\bar{D}$
11	1	1	X	X	
10	1	0	X	X	

Uscita c

CD \ AB	00	01	11	10	
00	1	1	X	1	
01	1	1	X	1	$c = B + \bar{C} + D$
11	1	1	X	X	
10	0	1	X	X	

Uscita d

CD \ AB	00	01	11	10	
00	1	0	X	1	
01	0	1	X	1	$d = C\overline{D} + A + \bar{B}\overline{D} + \bar{B}C + B\bar{C}D$
11	1	0	X	X	
10	1	1	X	X	

Uscita e

CD \ AB	00	01	11	10	
00	1	0	X	1	
01	0	0	X	0	$e = \bar{B}\overline{D} + C\overline{D}$
11	0	0	X	X	
10	1	1	X	X	

Uscita f

CD \ AB	00	01	11	10	
00	1	1	X	1	
01	0	1	X	1	$f = \bar{C}\overline{D} + B\bar{C} + A + B\overline{D}$
11	0	0	X	X	
10	0	1	X	X	

Uscita g

CD \ AB	00	01	11	10	
00	1	1	X	1	$g = A + \overline{D} + B\bar{C} + \bar{B}C$
01	0	1	X	1	
11	1	0	X	X	
10	1	1	X	X	

$a = C + A + BD + \bar{B}\bar{D}$
$b = \bar{B} + CD + \bar{C}\bar{D}$
$c = B + \bar{C} + D$
$d = C\bar{D} + A + \bar{B}\bar{D} + \bar{B}C + B\bar{C}D$
$e = \bar{B}\bar{D} + C\bar{D}$
$f = \bar{C}\bar{D} + B\bar{C} + A + B\bar{D}$
$g = A + \bar{D} + B\bar{C} + \bar{B}C$