

CHAPTER 12

UART CORE

Table 12.1 ASCII codes

Code	Char	Code	Char	Code	Char	Code	Char
00	(nul)	20	(sp)	40	@	60	`
01	(soh)	21	!	41	A	61	a
02	(stx)	22	"	42	B	62	b
03	(etx)	23	#	43	C	63	c
04	(eot)	24	\$	44	D	64	d
05	(enq)	25	%	45	E	65	e
06	(ack)	26	&	46	F	66	f
07	(bel)	27	'	47	G	67	g
08	(bs)	28	(	48	H	68	h
09	(ht)	29	)	49	I	69	i
0a	(nl)	2a	*	4a	J	6a	j
0b	(vt)	2b	+	4b	K	6b	k
0c	(np)	2c	,	4c	L	6c	l
0d	(cr)	2d	-	4d	M	6d	m
0e	(so)	2e	.	4e	N	6e	n
0f	(si)	2f	/	4f	O	6f	o
10	(dle)	30	0	50	P	70	p
11	(dc1)	31	1	51	Q	71	q
12	(dc2)	32	2	52	R	72	r
13	(dc3)	33	3	53	S	73	s
14	(dc4)	34	4	54	T	74	t
15	(nak)	35	5	55	U	75	u
16	(syn)	36	6	56	V	76	v
17	(etb)	37	7	57	W	77	w
18	(can)	38	8	58	X	78	x
19	(em)	39	9	59	Y	79	y
1a	(sub)	3a	:	5a	Z	7a	z
1b	(esc)	3b	;	5b	[	7b	{
1c	(fs)	3c	i	5c	\	7c	—
1d	(gs)	3d	=	5d	]	7d	}
1e	(rs)	3e	¿	5e	^	7e	~
1f	(us)	3f	?	5f	_	7f	(del)

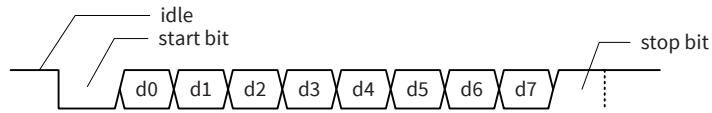


Figure 12.1 Transmission of a byte.

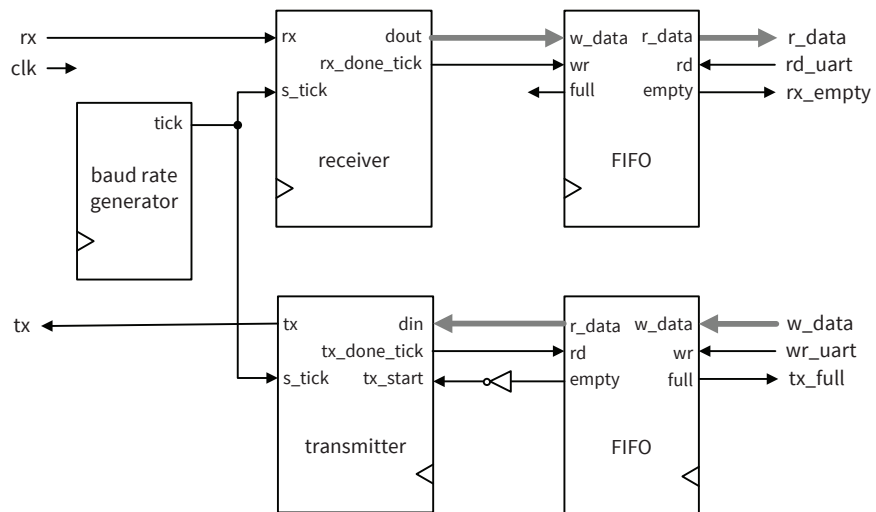


Figure 12.2 Block diagram of a complete UART.

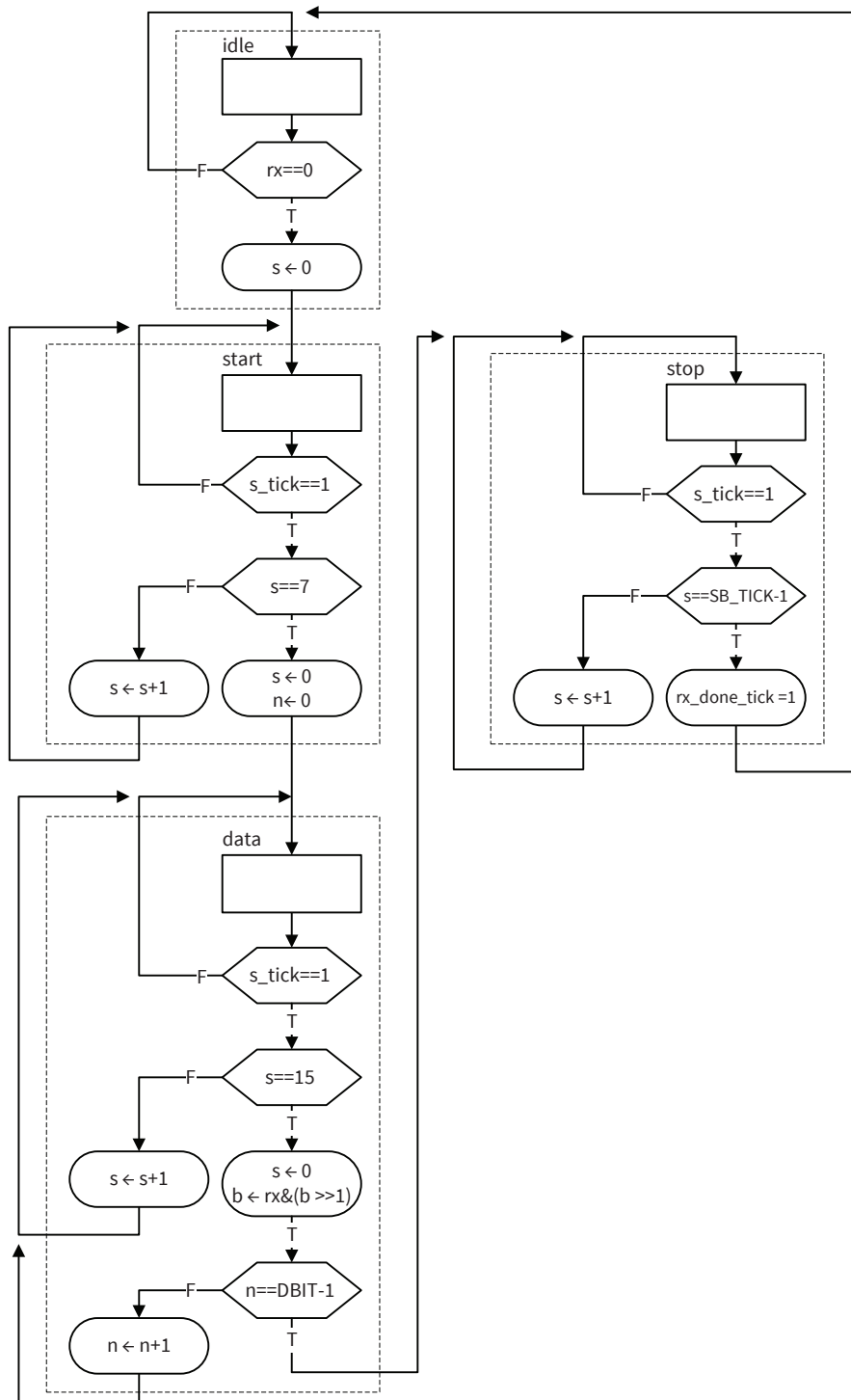


Figure 12.3 ASMD chart of a UART receiver.

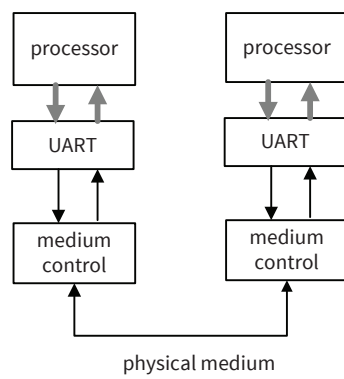


Figure 12.4 Layered model of an emulated serial port.

