Self-ID Packets

P1394a compatible PHY shall have no more than 19 ports. This means that P1394a compatible PHY's will never transmit a self-ID packet #3 as defined in 1394-1995. P1394a compatible PHY's will however transmit a self-ID end packet in addition to the other self-ID packets required by 1394-1995. Thus a P1394a PHY will sends two to four self-ID packets at the base rate during the self-ID phase of arbitration. As with 1394-1995 the number of packets sent depends on the maximum number of ports the PHY has.

The format of 1394-1995 self-ID packets is reproduced below (the inverse check quadlets are not shown but are present in the transmission):

Self-ID packet #0

10	phy_id	0	L	gap_cnt	sp	del	c	pwr	p0	p1	p2	i	m
2	6	1	1	6	2	2	1	3	2	2	2	1	1

Self-ID packets #1, #2, and #3

10	phy_id	1	n	rsv	pa	pb	pc	pd	pe	pf	pg	ph	r	m
2	6	1	3	2	2	2	2	2	2	2	2	2	1	1

	n	pa	pb	pc	pd	pe	pf	pg	ph
pkt #1	0	p3	p4	p5	p6	p7	p8	p9	p10
pkt #2	1	p11	p12	p13	p14	p15	p16	p17	p18
pkt #3	2	p19	p20	p21	p22	p23	p24	p25	p26

The self-ID end packet format is shown below (again the inverse check quadlet is not shown):

Self-ID end packet

10	phy_id	1	7	TBD	spd	0
2	6	1	3	16	3	1

In the above **sp** is the maximum 1394-1995 speed supported by the PHY, while **spd** is the absolute maximum speed. The presence of a self-ID end packet can be used to determine that the PHY is a P1394a compatible device. The self-ID end packet must always be transmitted last.