B OmniAccess Pinouts and Custom Cables

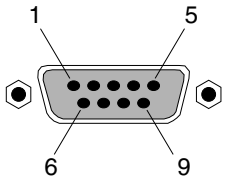
This appendix provides detailed information on pinouts and cables that are used with OmniAccess 512 WAN submodules. Information includes illustrations, descriptions, and pin diagrams.

♦ Note ♦

Although custom cables are available directly from Alcatel, you can build them using the information contained in this chapter.

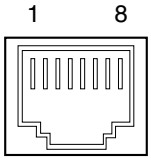
OmniAccess Pinouts

Console Management Port (DB-9 Connector)



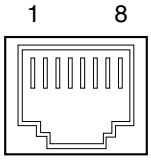
Pin Number	Standard Signal Name
1, 4, 6, 7, 8, 9	Not Used
3	TD (from connected console)
2	RD (to connected console)
5	Ground

Ethernet Port (RJ-45 Connector)



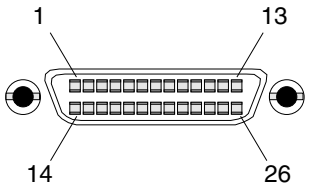
Pin Number	Standard Signal Name
1	RD +
2	RD –
4, 5, 7, 8	Not Used
3	TD +
6	TD –

WAN T1/E1 Port (RJ-48C Connector)



Pin Number	Standard Signal Name
1	Rx_Ring
2	Rx_Tip
3, 6	Chassis GND
4	Tx_Ring
5	Tx_Tip
7, 8	Not Used

WAN Universal Serial Port



Refer to the table on page B-4 for USP pinout details.

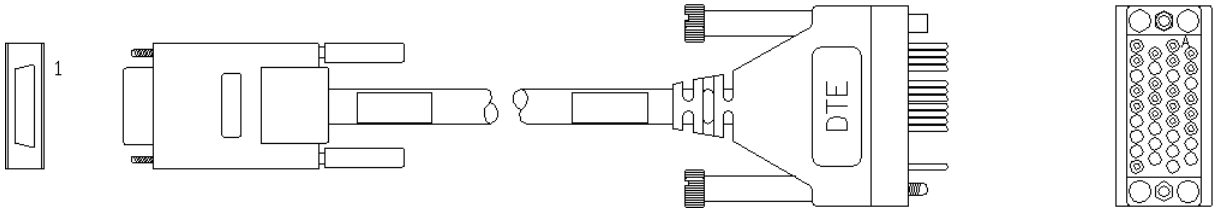
WAN Universal Serial Port Specifications							
		Alcatel SPI		EIA-530		RS-449	
Generic Signal Name	Source	Mnemonic	Pin	Mnemonic	Pin	Mnemonic	Pin
Shield	--	Shield	1	--	1	--	1
Signal Ground	--	AB	7	AB	7	SG	19
Transmitted Data	DTE	TD(A)	2	BA(A)	2	SD(A)	4
		TD(B)	14	BA(B)	14	SD(B)	22
Received Data	DCE	RD(A)	3	BB(A)	3	RD(A)	6
		RD(B)	16	BB(B)	16	RD(B)	24
Transmit Clock	DCE	TC(A)	15	DB(A)	15	ST(A)	5
		TC(B)	12	DB(B)	12	ST(B)	23
Receive Clock	DCE	TC(A)	17	DD(A)	17	RT(A)	8
		TC(B)	9	DD(B)	9	RT(B)	26
Ext. Transmit Clock	DTE	XC(A)	24	DA(A)	24	TT(A)	17
		XC(B)	11	DA(B)	11	TT(B)	35
Request To Send	DTE	RS(A)	4	CA(A)	4	RS(A)	7
		RS(B)	19	CA(B)	19	RS(B)	25
Clear To Send	DCE	CS(A)	5	CB(A)	5	CS(A)	9
		CS(B)	13	CB(B)	13	CS(B)	27
Data Set Ready	DCE	DR(A)	6	CC(A)	6	DM(A)	11
		DR(B)	22	CC(B)	22	DM(B)	29
Data Terminal Ready	DTE	TR(A)	20	CD(A)	20	TR(A)	12
		TR(B)	23	CD(B)	23	TR(B)	30
Data Carrier Detect	DCE	CD(A)	8	CF(A)	8	RR(A)	13
		CD(B)	10	CF(B)	10	RR(B)	31
Local Loopback	DTE	LL	18	LL	18	LL	10
Remote Loopback	DTE	RL	21	RL	21	RL	14
Ring Indicator	DCE	RI/TM	25	--	--	--	--
Test Mode	DCE	RI/TM	25	TM	25	TM	18
Cable Type 4	--	CTP4	18		n/c		n/c
Cable Type 3	--	CTP3	26		n/c		n/c
Cable Type 2	--	CTP2	13				
Cable Type 1	--	CTP1	22				
Cable Type 0	--	CTP0	10				

continued on next page...

WAN Universal Serial Port Specifications, continued							
		X.21/X.26		V.35		RS232	
Generic Signal Name	Source	Mnemonic	Pin	Mnemonic	Pin	Mnemonic	Pin
Shield	--	--	1	--	A	--	1
Signal Ground	--	G	8	102	B	AB	7
Transmitted Data	DTE	T(A) T(B)	2 9	103(A) 103(B)	P S	BA	2
Received Data	DCE	R(A) R(B)	4 11	104(A) 104(B)	R T	BB	3
Transmit Clock	DCE	--	--	114(A) 114(B)	Y AA	DB	15
Receive Clock	DCE	S(A) S(B)	6 13	115(A) 115(B)	V X	DD	17
Ext. Transmit Clock	DTE	B(A) B(B)	7 14	113(A) 113	U W	DA	24
Request To Send	DTE	C(A) C(B)	3 10	105	C	CA	4
Clear To Send	DCE	--	--	106	D	CB	5
Data Set Ready	DCE	--	--	107	E	CC	6
Data Terminal Ready	DTE	--	--	108	H	CD	20
Data Carrier Detect	DCE	I(A) I(B)	5 12	109	F	CF	8
Local Loopback	DTE	--	--	141	L	LL	18
Remote Loopback	DTE	--	--	140	N	RL	21
Ring Indicator	DCE	--	--	125	J	CE	22
Test Mode	DCE	--	--	142	NN	TM	25
Cable Type 4	--		n/c		n/c		
Cable Type 3	--		n/c		n/c		
Cable Type 2	--						
Cable Type 1	--						
Cable Type 0	--						

OmniAccess Custom Cables

V.35 DTE Cable (For Alcatel Serial Port-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

XPN 12002300

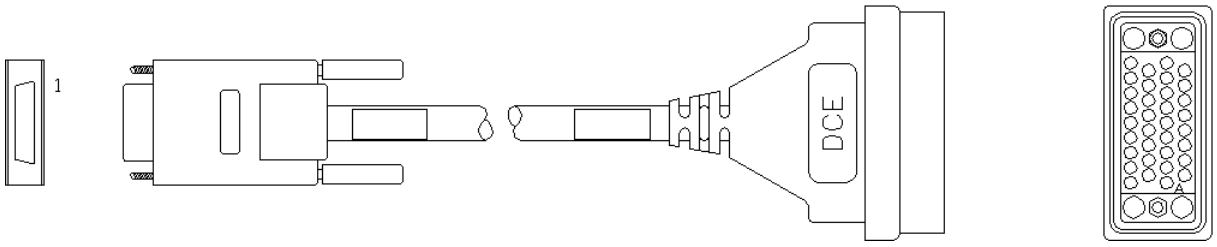
HD50-26		EMULATE DTE	V35-M
CTP4	18		
CTP3	26		
SG	7	B	AB
SHIELD	1	A	SHIELD
TD-A	2	P	BA-A
TD-B	14	S	BA-B
RD-A	3	R	BB-A
RD-B	16	T	BB-B
TC-A	15	Y	DB-A
TC-B	12	AA	DB-B
RC-A	17	V	DD-A
RC-B	9	X	DD-B
XC-A	24	U	DA-A
XC-B	11	W	DA-B
RS-A	4	C	CA-A
RS-B	19		
CS-A	5	D	CB-A
CS-B	2 13		
DR-A	6	E	CC-A
DR-B	1 22		
CD-A	8	F	CF-A
CD-B	0 10		
TR-A	20	H	CD-A
TR-B	23		
RL	21	N	RL
TM	25	NN	TM

Denotes twisted-pair

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

V.35 DCE Cable (For Alcatel Serial Port-to-DTE Device Connection)



The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

XPN 12005100

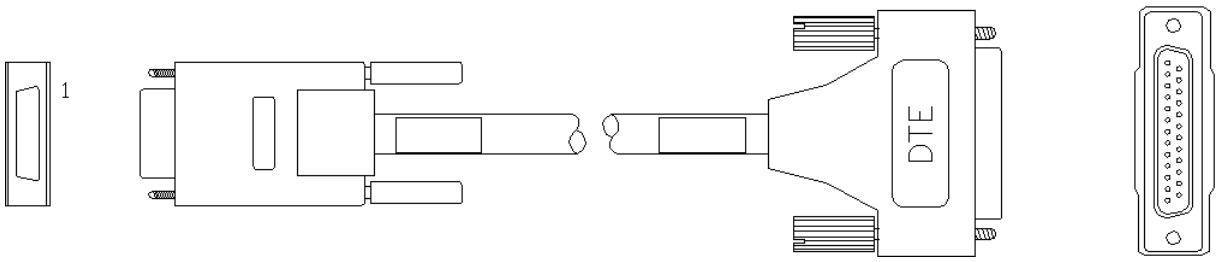
HD50-26		EMULATE DCE	V35-F
CTP4	18		
CTP3	26		
SG	7	B	AB
SHIELD	1	A	SHIELD
TD-A	2	R	BB-A
TD-B	14	T	BB-B
RD-A	3	P	BA-A
RD-B	16	S	BA-B
TC-A	15	Y	DB-A
TC-B	12	AA	DB-B
RC-A	17	U	DA-A
RC-B	9	W	DA-B
XC-A	24	V	DD-A
XC-B	11	X	DD-B
RS-A	4	F	CF-A
RS-B	19		
CS-A	5	D	CB-A
CS-B	2 13		
DR-A	6	H	CD-A
DR-B	1 22		
CD-A	8	C	CA-A
CD-B	0 10		
TR-A	20	E	CC-A
TR-B	23		
RL	21	NN	TM
TM	25	N	RL

Denotes twisted-pair

150 ohm resistor

2,1,0 Denotes CTP2, CTP1, CTP0, respectively

RS232 DTE Cable (For Alcatel Serial Port-to-DCE Device Connection)



The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.

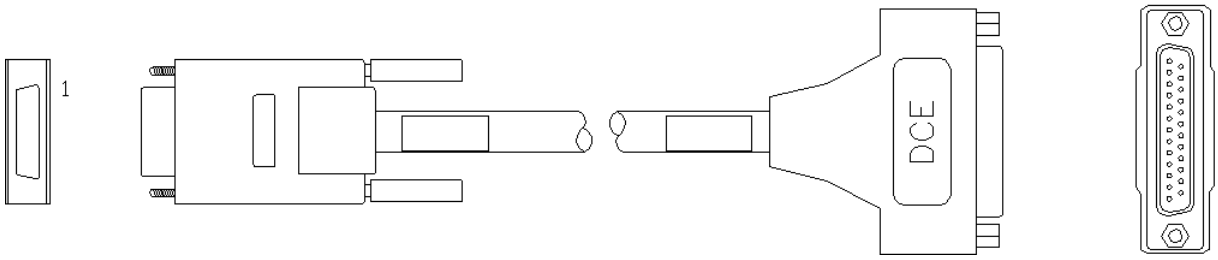
XPN 12002400 EMULATE DTE

HD50-26		DB25-M	
CTP4	18		
CTP3	26		
SG	7	7	AB
SHIELD	1	1	SHIELD
TD-A	2	2	BA-A
TD-B	14		
RD-A	3	3	BB-A
RD-B	16		
TC-A	15	15	DB-A
TC-B	12		
RC-A	17	17	DD-A
RC-B	9		
XT-A	24	24	DA-A
XC-B	11		
RS-A	4	4	CA-A
RS-B	19		
CS-A	5	5	CB-A
CS-B	**2** 13		
DR-A	6	6	CC-A
DR-B	**1** 22		
CD-A	8	8	CF-A
CD-B	**0** 10		
TR-A	20	20	CD-A
TR-B	23		
RL	21	21	RL
TM	25	25	TM

Denotes twisted-pair

2, 1, 0 Denotes CTP2, CTP1, CTP0, respectively

RS232 DCE Cable (For Alcatel Serial Port-to-DTE Device Connection)



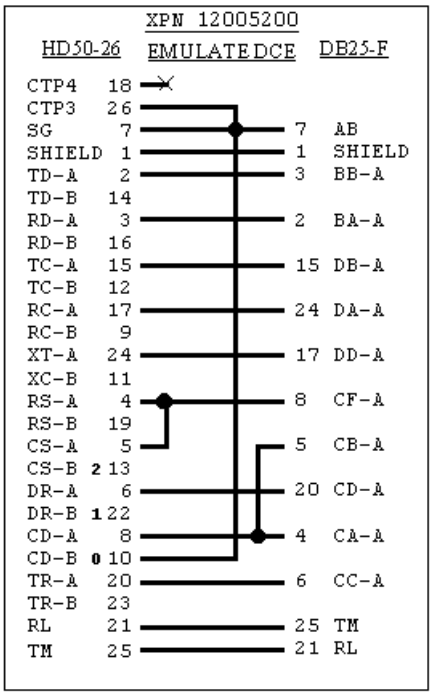
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

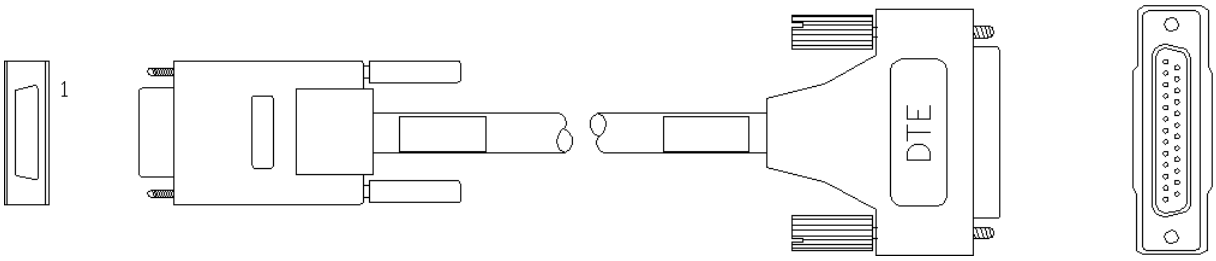
The table on the right shows the pinouts for the connectors.



Denotes twisted-pair

2, 1, 0 Denotes CTP2, CTP1, CTP0, respectively

RS530 DTE Cable (For Alcatel Serial Port-to-DCE Device Connection)



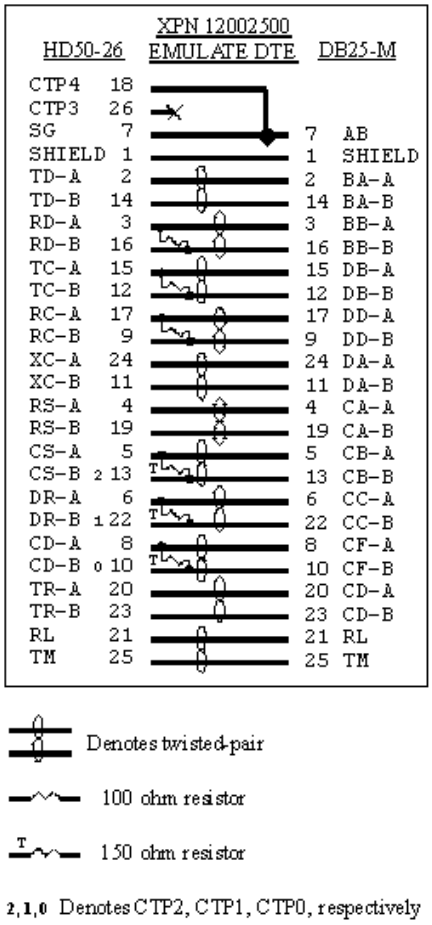
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

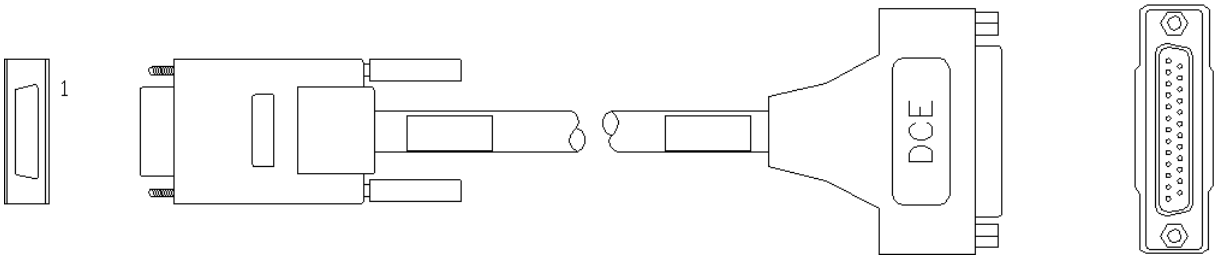
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



RS530 DCE Cable (For Alcatel Serial Port-to-DTE Device Connection)



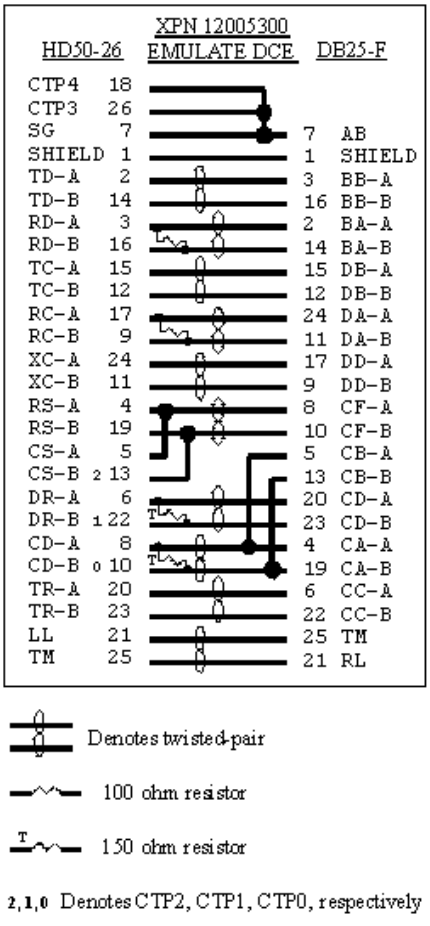
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

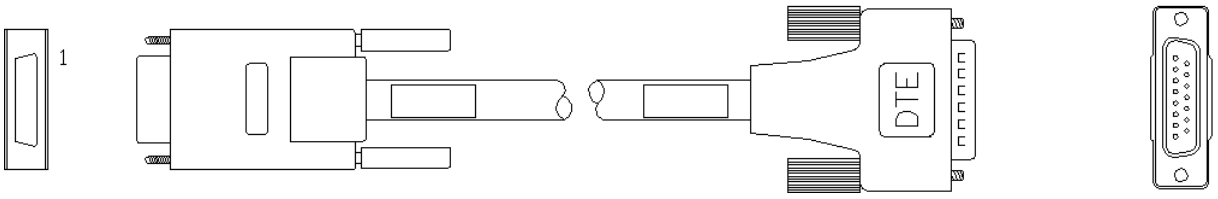
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



X.21 DTE Cable (For Alcatel Serial Port-to-DCE Device Connection)



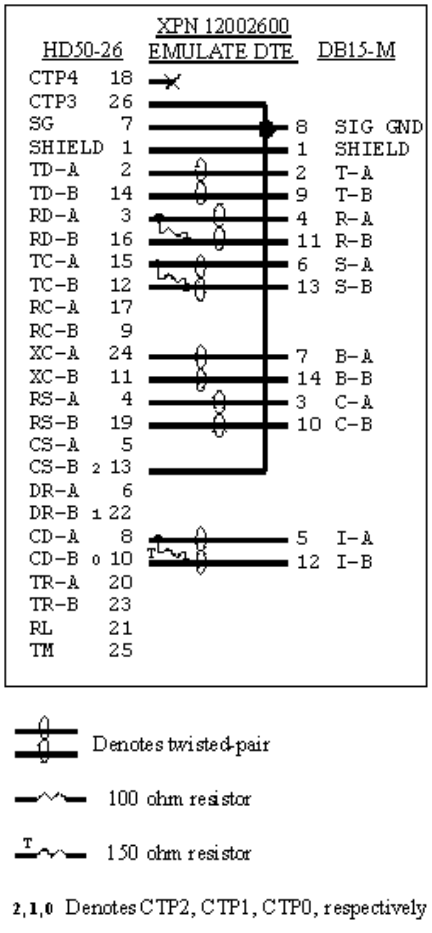
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

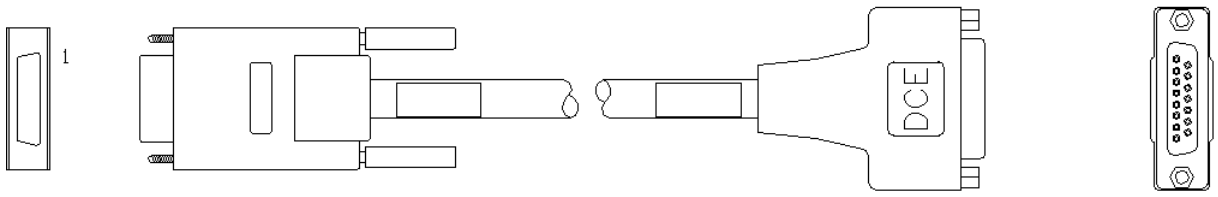
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



X.21 DCE Cable (For Alcatel Serial Port-to-DTE Device Connection)



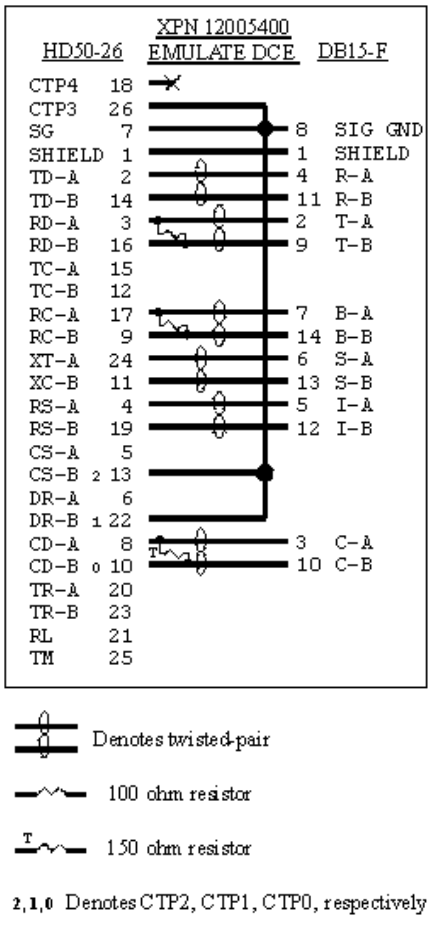
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

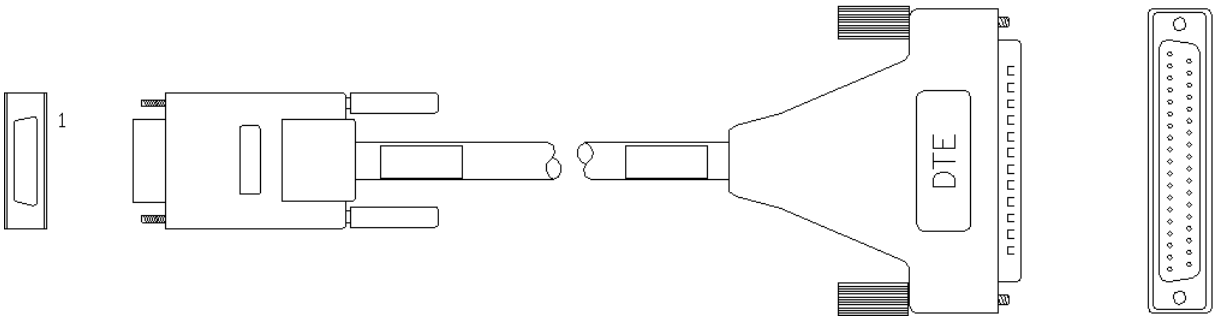
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



RS449 DTE Cable (For Alcatel Serial Port-to-DCE Device Connection)



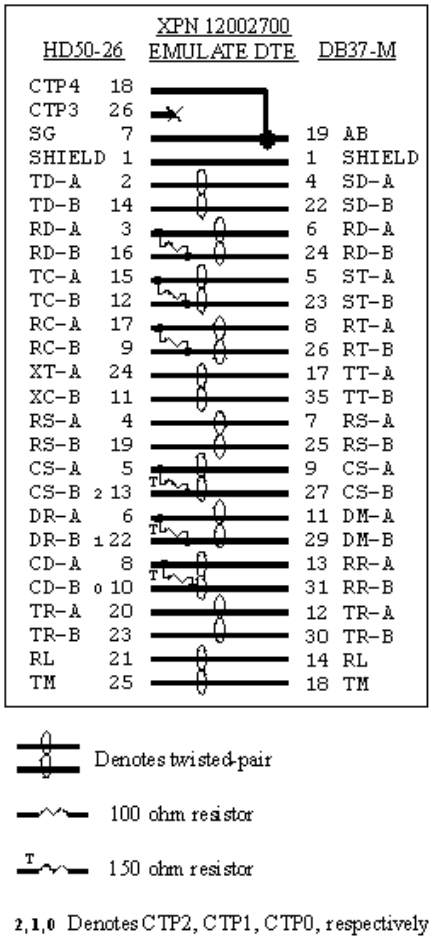
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26 Pin HD50 Connector-male
- AMP 750850-6 26 Pin HD50 Backshell

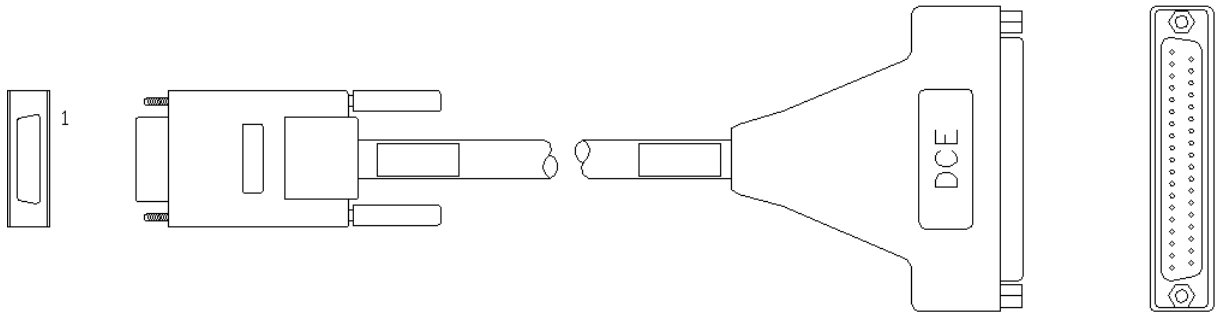
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with data-comm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



RS-449 DCE Cable Assembly (For Alcatel Serial Port-to-DTE Device 75Ω Connection)



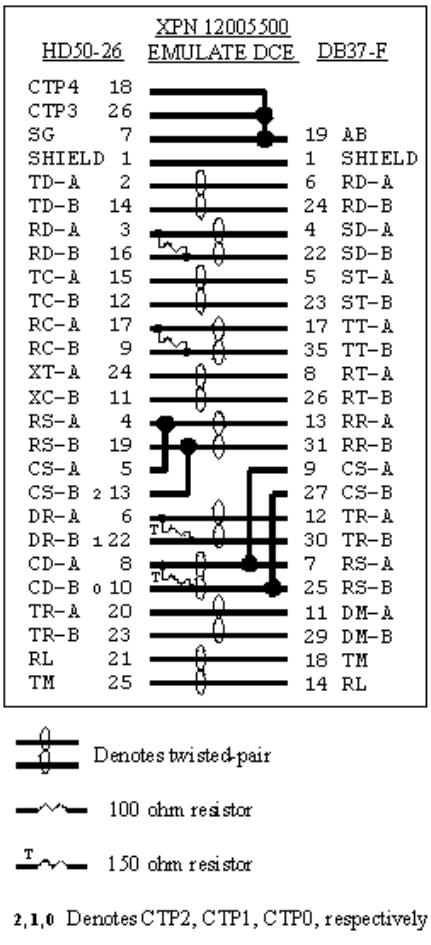
The following parts are recommended for the end of the cable connected to the Alcatel Serial Port.

- AMP 750833-1 26-Pin HD50 Connector-male
- AMP 750850-6 26-Pin HD50 Backshell

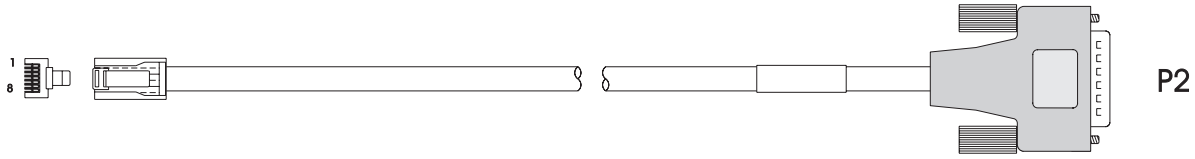
Parts for the customer end of the cable can be of any industry-standard manufacturer. Use of a shielded-type connector is recommended.

Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.

The table on the right shows the pinouts for the connectors.



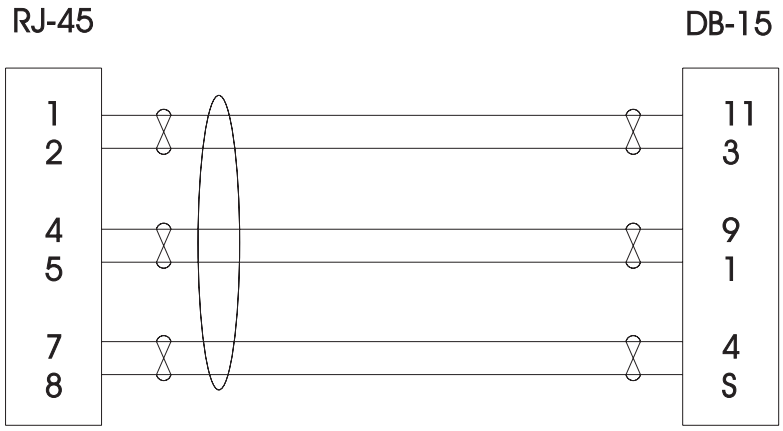
RJ-45 to DB15F Cable Assembly (For T1/E1 Port 120Ω Connections)



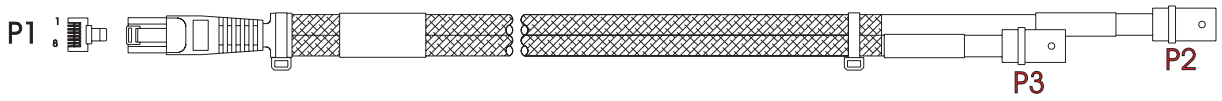
The following parts are recommended for the ends of the cable:

- For the switch side of the cable assembly (P1): 8-conductor RJ-45 round connector (MTP-88U or equivalent)
- Parts for the customer end of the cable (P2) can be of any industry-standard manufacturer. Use of a shielded-type DB-15 female connector is recommended.

  Cable should be constructed with datacomm-quality cable that has an overall mylar foil shield and braided-shield, terminated to the appropriate pins and connector shell at each end of the cable. Twisted-pair 28GA cable is preferred, with any of the pairs used for non-paired signals.



RJ-45 to BNC Cable Assembly (For E1 75Ω Port Connections)



The following parts are recommended for manufacturing the cable:

- For the switch side of the cable assembly (P1): 8-conductor RJ-45 round connector (MTP-88U or equivalent)
- For the cable: RG-187A coaxial cable (Belden 83267 or equivalent)
- For the customer end of the cable assembly (P2 and P3): Coaxial BNC connector, 75Ω (Amp 413760-8, or equivalent).

The figure below shows the pinouts for the cable assembly.