S/N(dB) S= -20 dBm	Modem Speed (bps)	Modem Selected
26.5 ± 2	14400 to 12000	V.17
23.0 ± 2	12000 to 9600	V.17
20.0 ± 2	9600 to 7200	V.17
22.5 ± 2	9600 to 7200	V.29
18.5 ± 2	7200 to 4800	V.17 / V.27 ter
19.0 ± 2	7200 to 4800	V.29 / V.27 ter
16.5 ± 2	4800 to 2400	V.27 ter

6.3 MULTIPLE PAGE TRAINING

The modem speed shall occur as shown below at the signal to noise ratios indicated for multiple page transmission where the noise is introduced during page transmission.

S/N(dB) S= -20 dBm	Modem Speed (bps)	Modem Selected
25.0 ± 2	14400 to 12000	V.17
21.5 ± 2	12000 to 9600	V.17
18.5 ± 2	9600 to 7200	V.17
21.0 ± 2	9600 to 7200	V.29
17.5 ± 2	7200 to 4800	V.29 / V.27 ter
15.0 ± 2	7200 to 2400(4800)	V.17 / V.27 ter
15.0 ± 2	4800 to 2400	V.29 / V.27 ter

7. DROPOUT

Signal interruption less than 1.0 second may cause copy perturbations but will not cause communication shutdown.

Signal interruption grater than 6 second will cause immediate communication shutdown.

8. CARRIER DETECT

The terminal shall detect carrier within ± 7 Hz of the normal value within 15 ± 10 ms when carrier level is between 0 and -43 dBm for the high speed modem (V.27 ter or V.29). The T.30 handshaking modem (V.21) will detect carrier between 0 and -43 dBm in 500 ms.

9. DISTORTION

The terminal shall be capable of communication in the presence of the following transmission line distortions:
Xerox Line #1 Best case envelope delay and medium case attenuation

The terminal shall be capable of communication in the presence of Xerox Transmission Line #1 without degradation in performance.

APPENDIX P

COMMUNICATION PERFORMANCE (Interlagos-H)

1. TRANSMITTED POWER LEVEL

-15 to 0 dBm, service representative adjustable in 1 dB steps. Transmitted power level shall be measured at the Network Termination Point of the terminal with connecting 600 ohm resistance or appropriate complex impedance.

2. RECEIVED POWER LEVEL

The terminal should perform all performance for received power level from -9 to -43 dBm. The received power level shall be measured at the Network Termination Point of the terminal.

3. ECHO DELAY

Echo signal level of -25 dB below the received signal level.
Delay 0 to 1600 ms

4. SATELLITE DELAY

The terminal shall be capable of communication subject to satellite delay. The terminal shall be capable of handling two consecutive satellite "hops" of 1600 ms with no communication errors.

5. FREQUENCY SHIFT

The terminal shall be capable of communication in the presence of frequency shift from 0 to ± 2.5 Hz without degradation of terminal performance.

6. Distortion

The terminal shall be capable of communications in the presence of the following transmission line distortions:

Xerox Line #1 : best case envelope delay and medium case attenuation

The terminal shall be capable of communication in the presence of Xerox Transmission Line distortion #1 with no added noise - such that at least 50% of the attempts are at the speed of 24.4Kb/sec or grater, and, none are less than 14.4Kb/sec - without degradation in performance.

7. TRAINDOWN

7.1 SIGNAL TO NOISE RATIO

The terminal shall be capable of automatically selecting modem transmission speed by training down in the presence of various signal to noise ratio as defined below. Noise measurements are made using a C-message Filter in series with the measurement instrument. Terminals are connected back to back through a telephone line simulator using a "flat" telephone line.

7.2 FIRST PAGE TRAINING (V.34)

The modem speed shall occur as shown below at the signal to noise ratios indicated for single page transmission where the noise is introduced prior to the start of facsimile transaction. This measurement is made using a "flat" line.

S/N(dB) S= -20 dBm	Modem Speed (bps)	Modem Selected
No noise	33600	V.34
40	33600 to 31200	
37	31200 to 28000	
36	28800 to 26400	
34	26400 to 21600	
31	21600 to 19200	
29	19200 to 16800	
27	16800 to 14400	
25	14400 to 12000	
23	12000 to 9600	
22	9600 to 7200	
20	7200 to 4800	
18	4800 to 2400	
15	2400 to DCN	
All values ± 3 dB		Modem does not switch to V.17

7.3 FIRST PAGE TRAINING (V.17,V.29 and V27ter)

The modem speed shall occur as shown below at the signal to noise ratios indicated for single page transmission where the noise is introduced prior to the start of facsimile transaction.

S/N(dB) S= -20 dBm	Modem Speed (bps)	Modem Selected
26.5 ± 2	14400 to 12000	V.17
23.0 ± 2	12000 to 9600	V.17
20.0 ± 2	9600 to 7200	V.17
22.5 ± 2	9600 to 7200	V.29
18.5 ± 2	7200 to 4800	V.17 / V.27 ter
19.0 ± 2	7200 to 4800	V.29 / V.27 ter
16.5 ± 2	4800 to 2400	V.27 ter

7.4 MULTIPLE PAGE TRAINING (V.17,V.29 and V27ter)

The modem speed shall occur as shown below at the signal to noise ratios indicated for multiple page transmission where the noise is introduced during page transmission.

S/N(dB) S= -20 dBm	Modem Speed (bps)	Modem Selected
25.0 ± 2	14400 to 12000	V.17
21.5 ± 2	12000 to 9600	V.17
18.5 ± 2	9600 to 7200	V.17
21.0 ± 2	9600 to 7200	V.29
17.5 ± 2	7200 to 4800	V.29 / V.27 ter
15.0 ± 2	7200 to 2400(4800)	V.17 / V.27 ter
15.0 ± 2	4800 to 2400	V.29 / V.27 ter

APPENDIX Q CONSUMABLES

1. PACKAGING FORM

1-1 DRUM CARTRIDGE

The Drum Cartridge for Interlagos does not have a unique design.

1-1-1 SINGLE PACKING

Packed in a single carton

1-2 TONER CARTRIDGE

The Toner Cartridge for Interlagos is unique because of the shape of the rib.

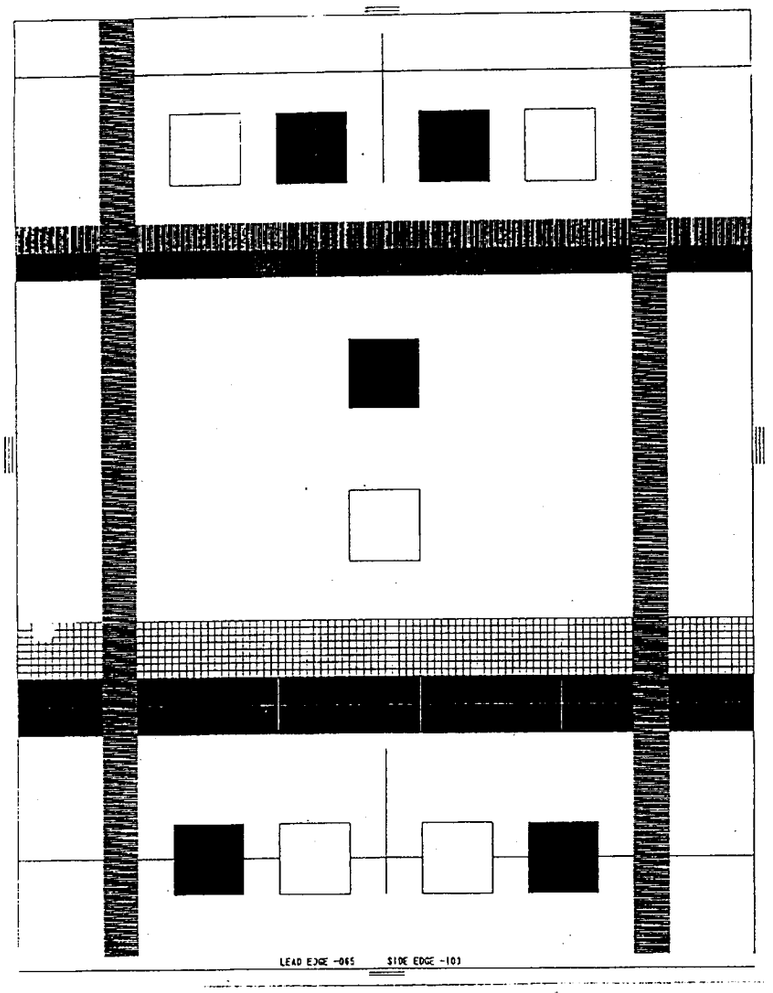
Therefore, it can not be used for products other than Interlagos.

1-2-1 SINGLE PACKING

Packed in a single carton

APPENDIX R PRINT TEST PATTERN

INTERLAGOS has two print test pattern. One is ALL BLACK pattern and the other one is LOGICAL pattern. The print pattern of the next page is the LOGICAL pattern sample.


LEAD EDGE -065
SIDE EDGE -103

APPENDIX S COMMUNICATION CODE

Communication result should be printed in the Activity Report using using communication code in this table.

CODE	DESCRIPTION
10	There was no recording paper or the cassette was not installed during the reception. This error occurs when the memory reception function is turned off.
11	A recording paper jam occurred during the reception. This error occurs when the memory reception function is turned off.
12	During the transmission, a document jam occurred.
13	During the transmission, the operation panel or the top cover unit was opend and the transmission stopped.
20	A power failure occurred during the transmission or reception.
22	During the transmission, a file error occurred due to a directory error.
30	The JOB CANCEL operation was attempted during the transmission or reception, and the communication was stopped.
32	The set number of document pages did not match the actual pages transmitted.
33	The polling password did not match, or no polling document existed in the remote
42	During a emory transmission or a reception, shortage of the image memory occurred.
50	Dialing and redialing was attempted as many as the specified count but the line was
53	The password did not match in a Relay or Mailbox Xerox transmission, and the transmission ended in failure.
87	There was no residual memory of the remote party's FAX unit during a Relay/Mailbox Xerox transmission.
B0	DIS signal could not detected. (Negotiation error)
B1	DIS/NSF signal that cannot handle by the sender is received. The receiver received NSS/DCS other than those decleared by DIS/NSF signal.
B2	Received DCN signal during negotiation phase.
B3	DCS/DTC signal was not detected during negotiation phase on the receiver side.
B4	The sender performed fall-back but the transmission was not completed. The receiver was not detect TCF or detected DCN signal after sending FTT signal.
B5	The sender was not setect CFRR/FTT signal after sending TCF.
C0	Image signal carrier was not detected on the receiver side.
C1	High speed signal(image signal) was not detected on the receiving side.
C2	After detecting a high speed signal(image signal), carrier off was detected on the
C3	After detecting a high speed signal(image signal), EOL was not detected in the image signal or unknown compression pattern was detected on the receiver side.
C4	The EOL was not detected in the high speed signal(image signal) within specified term on the receiver side.
D0	A response signal was not detected on the sender side. A post signal was not detected on the reciver side.
D1	The DCN signal was received during phase D.
D2	RTN or PIN signal was sent or received due to the image data was corrupted.
E0	During transmission or reception, DRAM read or write error occurred.
E6	An error relating to the printer occurred.
F0	The communication failed due to an overrun of the firmware.
F1	The communication failed due to an overrun of the Firmware caused by hardware

APPENDIX T TEC ORIGINAL TEST CHART

Attached document is a TEC ORIGINAL TEST CHART which should be used to measure communication speed.

TEC CORPORATION

KANDA 1-14-10, CHIYODAKU
TEL 292-6223, FAX 292-6440

Ref. 5963/TEC

1st Apr. 2001

Mr. H. Ogawa
Manager
Sales Division

Dear Hal,

Permit me to introduce you the facility of Super G-3 facsimile communication.

Super G-3 was named by CIAJ for the facsimile that employs V.34 FAX MODEM. Between two Super G-3 facsimiles, transmission time is drastically reduced to three seconds for A4 one page over PSTN. Maximum transmission speed of V.34 is 33.6 kbps, faster than 14.4kbps of V.17 MODEM. Super G-3 facsimile also reduce protocol session time with new V.8 handshake protocol.

You may be fascinated Super G-3 facsimile. We anticipated this new de facto standard would become popular worldwide.

Yours sincerely

M. Fujii
Manager
Facsimile Engineering

APPENDIX U CHARACTER SET FOR NAME PROGRAMMING

Key	Characters																							
1	1																							
2	A	B	C	2	a	b	c	タ	チ	ツ	テ	ト	ナ	ニ	ヌ									
3	D	E	F	3	d	e	f	ネ	ノ	ハ	ヒ													
4	G	H	I	4	g	h	i	フ	ヘ	ホ	マ													
5	J	K	L	5	j	k	l																	
6	M	N	O	6	m	n	o	ム																
7	P	Q	R	S	7	p	q	r	s	°														
8	T	U	V	8	t	u	v	ル	レ	ロ	ワ													
9	W	X	Y	Z	9	w	x	y	z															
0	(	+	)	sp	0		!	"	#	$	%	&	'	*	,	-	.	/	:	=	?	@	_	

APPENDIX V MENU MAP

LEVEL 1	LEVEL 2	LEVEL 3
1.Fax features	1.Send option	01.Secure send
		02.Error correct-ECM
		03.Sub address ITU-T
		04.Send after scan
		05.Cover sheet
		06.Delay start
		07.Direct send
		08.Priority
		09.Resend
	2.Listen to dial	
	3.Polling	01.Poll
		02.Scan to be polled
		03.Send then poll
		04.Continuous poll
	4.Number of pages	
	5.Secure receive	
	6.Chain dial	
	7.Charge code	
	8.Mailbox	01.Confidential
		02.Bulletin Board
		03.Relay request
		04.Setup & Delete
	9.Confirmation page	
2.Print reports	1.Settings	
	2.Pending jobs	
	3.Department codes	
	4.ITU-T mailbox	
	5.Phonebook	
	6.Activity	
3.Phonebook setup	1.Speed dial	
	2.Groups	
	3.One touch keys	
4.Initial setup	1.Language	
	2.Date & Time	
	3.Machine ID	

APPENDIX V MENU MAP

LEVEL 1	LEVEL 2	LEVEL 3
5.Default settings	1.Machine settings	01.Speaker volume
		02.Power saver
		03.Department code
		04.Account code
		05.Line Monitor
		06.Receive interval
		07.Error correct-ECM
		08.Collate copy
		09.Dial mode
		10.Redials
		11.Answer mode
	2.Scanner & Printer	01.Scan resolution
		02.Long original
		03.Paper size
		04.Change drum
	3.Fax-send	01.Memory send
		02.Secure send
		03.Cover sheet
		04.Resend stored fax
		05.Send header
		06.Send after scan
	4.Fax-receive	01.Secure receive
		02.Receive to memory
		03.Reduce receive
		04.Discard extra
		05.Collate fax
		06.Refuse junk mail
		07.Receive footer
		08.Separator page
	5.Reports	01.Activity report
		02.Fax/poll/relay
		03.Reception reports
	6.Remote service	01.Remote access
		02.Download
		03.RDC password
		04.Supplies order
6.Self test	(TBD)	
7.Menu map		