San Mateo Telemedicine System
(January 27, 2003)

2	**Clinical Telemed IP System**	Package
	Pentium 4 2÷GHz Imaging Workstation	
	DVD, CDRW, CDROM Drive	
	17" TFT Flat Panel Display	
	Video Conferencing Add-In (See Attached)	
	Remote Control Video Conferencing Camera	
	Shure Table Top Mic	
	Keyboard & Mouse	
	Kodak 3 MegaPixel Digital Camera with Docking Station	
	Video Capture Card & Foot Switch	
	Second Opinion Professional 5.0	
	Rollabout Clinical Cart	
1	**Base Station Telemed ISDN/IP System**	Package
	Pentium 4 2÷GHz Imaging Workstation	
	DVD, CDRW, CDROM Drive	
	17" TFT Flat Panel Display	
	Video Conferencing Add-In (See Attached)	
	512K ISDN Communication Card	
	Remote Control Video Conferencing Camera	
	Shure Table Top Mic	
	Keyboard & Mouse	
	Second Opinion Professional 5.0	

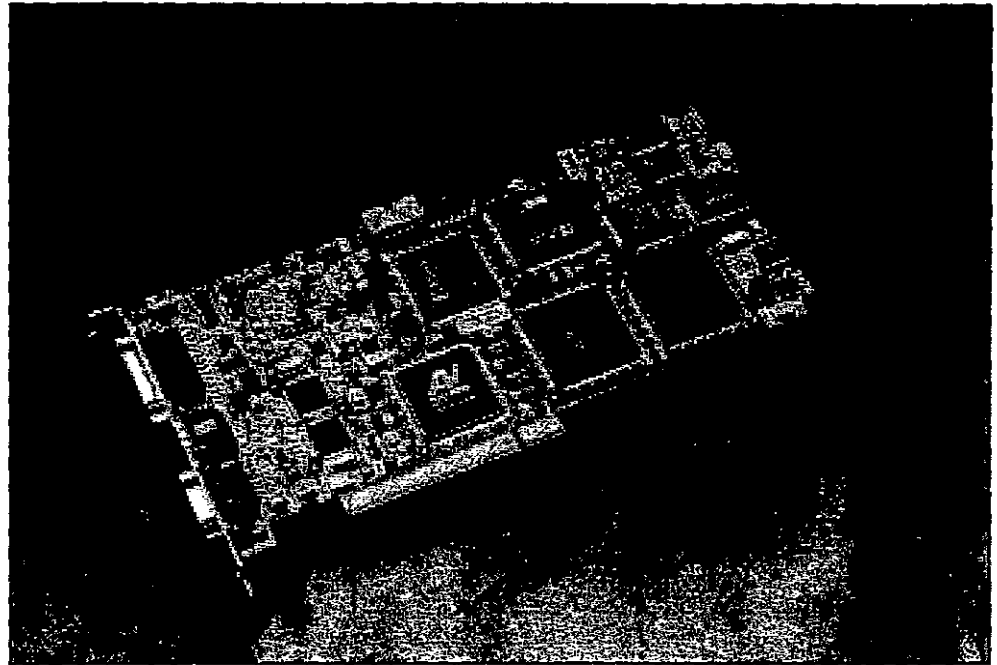|		
	Telemedicine System Total Package Price	$44,000
4	Days Labor: Setup, Install, Configure, & Train (@ $1,200/ea)	$4,800
3	Second Opinion Professional Annual Support (@ $500/ea)	$1,500

Telemedicine System Package Price	$44,000
Less Second Opinion Standard UC Davis Upgrade Credit	<$4,000>
Net Telemedicine System Package Price	$40,000
Non Taxable Labor Total	$6,300
CA Sales Tax @ 8.25%	$3,300
Grand Total	$49,600

Zydacron
Quality Videoconferencing Solutions

SUSTAINED 30 FRAMES PER SECOND CIF

Z360 for Windows 98/NT
Single PCI Board for High Speed ISDN & LAN Videoconferencing

FEATURES:

- H.320 and H.323 v2 standards compliant

- Sustained 30 fps

- Single board, PCI-based codec

- High speed T.120 support up to 128kbps

- Call size up to 768kbps

- Native H.323 ATM support, Annex C

- Dual monitor support, composite & VGA

- Microsoft NetMeeting™ integration for T.120 support

- End-user diagnostics

BENEFITS:

- Easy to use interface

- Low-cost, robust videoconferencing for ISDN and corporate networks

- Easy troubleshooting self diagnostic capabilities

- Group conferencing ready

A single, PC-based board requiring just one PCI slot, the Z360 provides exceptional H.320 and H.323 v2 compatible videoconferencing at a sustained 30 frames per second, with T.120 support for data collaboration via full Microsoft NetMeeting™ integration. The Z360 enables integration with PC hardware to deliver "plug and play" videoconferencing over ISDN, V35 or IP, including native ATM H.323 (annex C).

The Z360 software runs on Windows 98/NT and includes built-in system configuration, an integrated ISDN analyzer and video overlay that works over the PCI bus to most PCI VGA controllers. It includes 384 Kbps Tri-BRI support and 768 Kbps V.35 support.

High quality at a low cost makes the Z360 ideal for OEMs, VARs and System Integrators. Zydacron's core codec technology makes this codec a winner for business, government and educational institutions requiring robust PC-based videoconferencing. It's a must for users who need the highest quality video, low-delay audio with quick and reliable connections.

The Z360 is a breakthrough desktop videoconferencing technology that provides simplicity, flexibility and quality at value pricing.

Z360 for Windows NT Specifications

Z360 FOR WINDOWS 98/NT STANDARD PACKAGE
- Z360 Codec board
- Software:
  - Z360 Application
  - Microsoft NetMeeting™
  - DirectX
  - Microsoft® Internet Explorer 4.0
- User manual
- Cables:
  - 3.5mm headset
  - Line Input
  - S-Video/ or composite in and out
  - S-Video to RCA
  - Soundcard connector
  - ISDN

SYSTEM REQUIREMENTS
- 400 MHz or higher Pentium PC
- 64 MB RAM*
- 1 Free PCI slot
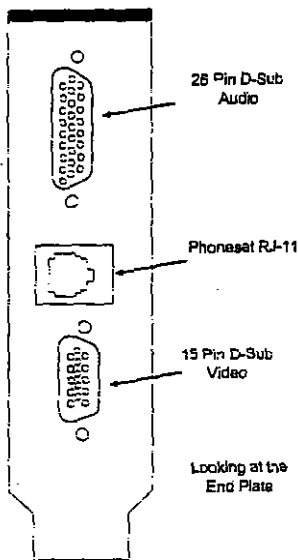- 30 MB available hard drive space

BOARD DIMENSION
- 8.70" x 4.20" (22.1cm x 10.67cm)

OPTIONS
- Speakers
- Headset with microphone
- Pan-tilt-zoom camera
- Telephone handset
- Dual monitor

FIGURE 1.1: View of Z360 Backplate connections

26 Pin D-Sub Audio

Phoneset RJ-11

15 Pin D-Sub Video

Looking at the End Plate

Z360 FOR WINDOWS 98/NT APPLICATION FEATURES
- Drag & drop file transfer
- Far-end camera control
- Self-view picture-in-picture (PIP)
- Chat feature
- Customizable toolbar
- Phone handset pop-up dialing menu
- Netmeeting for application collaboration and whiteboard
- Video capture and display snapshot

VIDEO
- H.261 at 30 fps
- H.263 (H.323 only)

DATA
- T.120

AUDIO STANDARDS
- G.711
- G.728
- G.722
- G.723

OTHER STANDARDS
- H.225
- H.221
- H.281 (H.320 only)

Table 1.1.1 Video I/O
DB-15 3-row (DB-9 shell)

Pin#	Signal	Description
1	GND	
2	Y/CVBS2	Y or Composite video input 2
3	CHROMA2	Chroma video input 2
4	CVID_OUT	Chroma video output
5	CAM_LINE	Camera Line-level audio input
6	+12VPower	12 volts 1500 ma fused
7	GND	
8	Y/CVBS1	Y or Composite video input 1
9	CHROMA1	Chroma video input 1
10	YVID_OUT	Y video output
11	+5VPower	5 volts 500 ma fused
12	GND	
13	GND	
14	GND	
15	CVBS_OUT	Composite video output

TABLE 1.1.3 : Phoneset RJ-11

Pin #	Signal	Description
1		
2	TIP	Telephone Supply
3	RING	Phone Return/Signal
4		

REGULATORY APPROVALS
EMI Compliance   CE
- US   FCC Class B compliant
- Europe   EN55022 Class B
- Australia EMI (AS3548)

Safety
- US   UL 1950
- Canada   CSA 225
- Europe   EN60950
            EN41003 ISDN

EMC
- Europe   EN50082-1

Power
- +5v +/- 5% 2.0 Amps (Max)
- +12v +/- 5% 250 mA (Max)
- -12v +/- 5% 250 mA (Max)

Table 1.1.2 Audio I/O
DB-26 3-row (DB-15 shell). NOTE: 12 volt power 1500 ma total from both connections

Pin#	Signal	Description
1	IIC_SD	IIC serial data
2	AUX_LINE_IN	
3	LINE_INL	
4	AUX_OUT	
5	(n/c)	
6	HEADSET_MIC_IN	
7	+12VPower	12 volts 1500 ma fused
8	BAL_MIC_R+	
9	BAL_MIC_L+	
10	IIC_CLK	IIC clock
11	(n/c)	
12	LINE_INR	
13	SPEAKER_OUT	
14	LINE_OUT	
15	HEADSET_OUT	
16	(n/c)	
17	BAL_MIC_R-	
18	BAL_MIC_L-	
19	GND	
20	GND	
21	GND	
22	GND	
23	GND	
24	GND	
25	GND	
26	GND	

Zydacron
Quality Videoconferencing Solutions

http://www.zydacron.com

Geoffrey Dottery - RE: proposal

From: "Tim Kaufman" <TimK@2opinion.com>
To: <RSpencer@co.sanmateo.ca.us>
Date: 1/27/03 9:48 AM
Subject: RE: proposal

Dr. Spencer,

I worked on your system this weekend. Attached is a quote that will give you everything you need for a successful telemedicine demonstration project. It includes fully configured telemedicine workstations with Second Opinion Professional 5.0, 30 frames per second h.323 IP video conferencing to all of your sites and 512K ISDN capabilities at your base location. The specifications on the videoconferencing codec is attached. The clinical sites includes Kodak digital cameras, docking stations, Otoscopes and a hi-end roll around cart. A picture of the cart is also attached.

As you will see in the quote we credited $4,000 for the Second Opinion Standard you received from UC Davis and we are going to give you two "evaluation" Otoscopes that can be used for a variety of clinical imaging needs. These two scopes are valued at $14,000. The $4,000 credit and the $14,000 worth of scopes enabled us to work within the budget parameters you specified.

We can for sure have a demonstration system in place for your February 6th demo. All of the systems may not be in place but we will make sure the demo goes off without a hitch. You need to share with me the plan and what you intend to demonstrate.

If you like what I am proposing and you wish to move forward, we need a 50% deposit, roughly $25,000, to get the ball rolling. If you have any questions please give me a call.

Best regards,

Tim Kaufman
Second Opinion Software

(310) 538-2800

-----Original Message-----
From: Spencerrg@aol.com [mailto:Spencerrg@aol.com]
Sent: Sunday, January 26, 2003 9:54 PM
To: Tim Kaufman
Cc: rspencer@co.sanmateo.ca.us
Subject: proposal

> Tim..I would very much much like to do most (if not all of our Telemedicine business with Second
> Opinion, although I know that WireOne is hard to beat on the FX. Here are our start up needs and
> time table : We would like to set up a local hospital speciality hub and a spoke at the Jail and Coast
> Clinic. We have a proven network for video over IP and would like a bridge to be able to toggle to
> ISDN when the need arises. We would like a configuration similar to the planned Blue Cross
> Telemedicine Pilot network upgrade. . We have seed money to prove this concept from the the
> County and a grant but must restrict our initial start-up to the +/-50K range. We would like to go live
> on Feb 6 when our hospital hosts a medical delegation from Russia and our CEO wants to
> showcase telemedicine. I could envision opportunities for overseas business contacts for

secondopinion if we can pull off a demo. Can we realisticiy make this happen?. I will be at the hospital all Monday afternoon and all day on tues. Bob.

Robert G. Spencer M.D. FACEP, FCCP
Medical Director
Division of Emergency Medicine
Department of Surgery
San Mateo Medical Center
222W39th Ave
San Mateo,CA 94403
650-573-2671, 2513, 2696 (fax)
RSpencer@co.sanmateo.ca.us
spencerrg@aol.com