SATLIGHT
Transportable Scanner for Instant Transmission of Color Photos

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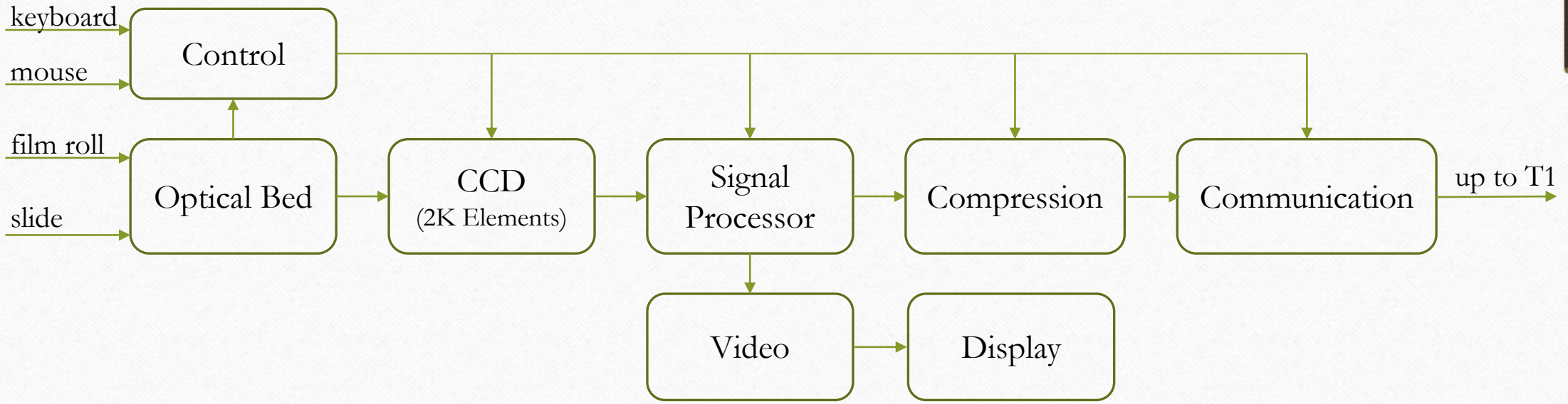
Motivation

- Late deadlines for breaking news
- Publisher controlled distance and time
- High speed network links
- Lossless compression technology
- Distributed color scanning/printing

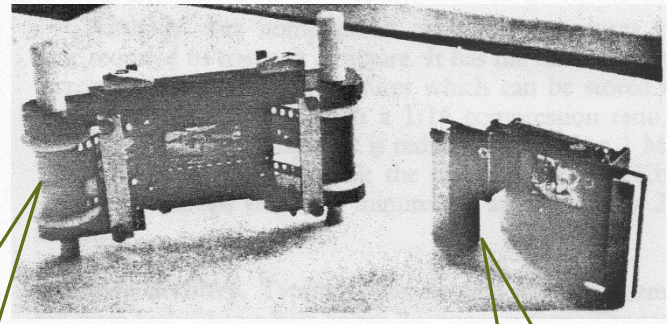
System

- Embedded OS, 8086 processor



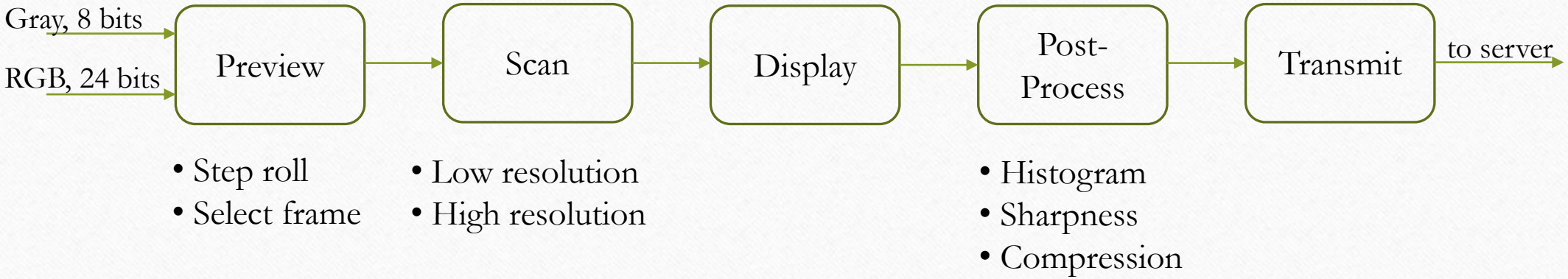
Optical Bed

- Input: 35 mm film roll or slides,
  - color or b/w, positive or negative
- 1726x2557 picture elements
  - Resolution: 75 or 9 samples/mm
- 5-filter wheel
  - Multi-pass color scan



Workflow

- A few simple screen menus
  - Field photographer operable



Transmission Time

- High-resolution scan of 13.5 MBytes file
  - Error-free communication (75% efficiency)
  - Typical 5.5 min compression time per frame and 60:1 ratio

Communication Link	Uncompressed Data	Compressed Data
56 Kbits/sec (US)	42.8 min	62 sec
64 Kbits/sec (EU)	37.5 min	39 sec
1.544 Mbits/sec (US)	93.3 sec	negligible
2.048 MBits/sec (EU)	70.3 sec	

Mission

- Cover three back-to-back newsworthy events:
  - Democratic Convention in San Francisco, California
  - Summer Olympics in Los Angeles, California
  - Republican Convention in Dallas, Texas
- Collaborate with USA Today
  - Service European publishers for Olympics coverage

Participating European Publications

Publication	Country
Printing World	UK
Nieuwsblad	Belgium
Il Giorno	Italy
Quick Magazine	Germany
V. N. U.	Netherland
Seald	Germany
Burda	Germany
European Runner	Netherland

Publication	Country
Gamma Press	UK
Sunderland Echo	UK
Portsmouth News	UK
Scottish Daily Record	Scotland
Wolverhampton Star	UK
Dagens NyHeter	Sweden
Horse & Hound	UK
Roularda Sport	Belgium

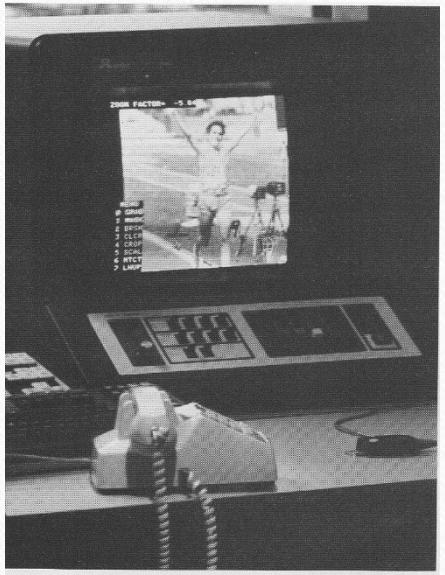
USA Today

Usa Today sends Color Photos by Satellite from Olympics

Time is very critical. The Scitex scanner allows us to go with late deadlines that otherwise we would not be able to have to provide photos of that day's event for the next day's issue.

The Scitex scanner puts time and distance more in our court. It allows us faster transmission, higher resolution and better quality pictures. Before we were at the mercy and the quality of phone lines.

The Gannetteer, September 1984



Photograph of Joan Benoit, with her arms raised in victory as she completes the first women's Olympic marathon, is on the Scitex color terminal to be color corrected, cropped and sized before being sent through the Crosfield scanner for output as a negative.

Summer Olympics

The Seybold Report

Scitex mounted one of the boldest markting campaigns in memory by taking its new Satlight transportable scanner on tour to the U.S. political conventions and the Olympics. Dozens of news organiztions transmitted pictures from the Olympics via Satlight.

We were impressed with Satlight. It is very clever, very sophisticated and surprisingly easy to use. We think it is the first of a whole family of reasonably priced and virtually "fool-proof" Scitex input scanners for local, bureau and transportable applications.

August 20, 1984

The S. Klein Newsletter

A 110lb. Scitex News Scanner Transmits Photos Taken in Field

From imaging pioneer Scitex Ltd. of Hertzliya, Israel comes a transportable 110-lb. Satlight scanner for transmitting color news photos taken in the field directly over phone lines to a host Scitex console where the photos can be prepared for color separation and printing to meet tight publishing deadlines.

July 23, 1984

Newsweek

Scitex's Satlight: from Paris to New York in Seconds

Using the Satlight scanner, publications receive color photographs of events thousands of miles away that occur only hours before the printing process starts running. The photographer in the field has only to develop the film and place the desired negative or slide on the unit viewer. The photo image will appear on a 10" color monitor for preview. With a push of a button, the scanner converts the image into a digital compressed code and sends it via a high speed transmission link to the home office. August 13, 1984

Team

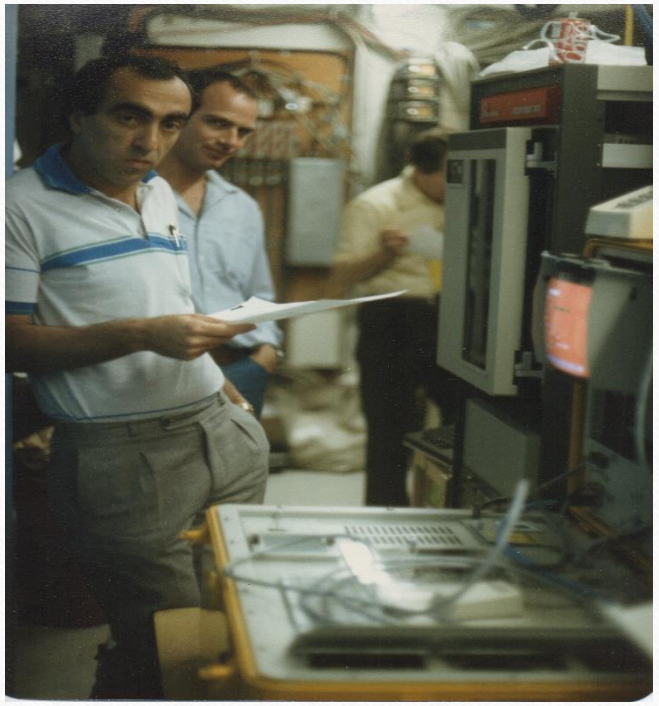
Scitex 1984

Prototype

Scitex 1984

Off We Go!

First Live Transmission!



Pre-Production Unit

Star Magazine

How we brought you the wedding?

Half a million dollars worth of state-of-the-art technology – plus the telecommunication wizardy of AT&T – was needed to bring you the fantastic color wedding photos.
Only minutes after Fergie walked down the aisle, color transparencies were being rushed through the streets of London.

Just married — and they It was the wedding the whole world watched and it went without a hitch. For Sarah — Britain's newest royal — and her Prince Charming the relief shows

Using a special portable transmitter developed by the Israeli company Scitex, they were then beamed via Satellite 22,000 miles above the earth, to our printing plant in Hackensack, NJ.
Incredibly each photo took less than a minute to transmit.

August 6, 1986

Thank you Efi Arazi for your vision and unwavering support!

„מזוודה" שמעבירה תמונות מניו־יורק ללונדון ב־3 דקות

"The Satlight is as simple to use as dialing a phone" (Efi)

Summary

- A tiny team
- 7 months from concept to inception
- Scalable in resolution and bandwidth
- Small form factor, affordable
- Inspires new generations