

HPCN in China

NCIC (National Research Center for Intelligent Computer Systems)

- located in Beijing

-Research topics:

- Hardware: SMP and MPP
- Software: OS, Prog. Environment

FUDAN University (Institute of Parallel Processing)

- located in Shanghai

- Research topics:

- Software: parallelizing compiler

JIAO TONG University

located in Shanghai

Research topics:

- Software: HPF compiler

NCIC

R&D Center on advanced Computer Technology
funded by the 863 program

R&D achievements

first China-made SMP (1993)

first China-made MPP (1995)

Collaboration

Motorola (joint laboratory)

started in 1996

Human resources

80 employees { 16 PhD
30 MS

Technology transfer

Dawning Information Industry Corp.

(June 1993)

to sale SMPs and MPPs goal:

(10% of the Chinese HPC market)

1996: 250-300 units

1997: ~ 1000 units~

Products

- Dawning - I (SMP)

- Dawning 1000 (MPP)

1000 plus

NCIC Projects and Dawning Products

SMP

- Dawning - 1 (4-16 processors)
- Dawning - 2

MPP

- Dawning 1000 (32)
- Dawning 1000 plus (64)
- Dawning 2000 (1998)

(32 - 128)

256

Research
projects

- Dawning 3000

S863

5000

goal: 1 Teraflop

Conclusion

HPCN Technology is considered very important by Chinese authorities

scientific and engineering computation
OLTP application

NCIC will play an important role

involvement in 863 high-tech R&D program
future program (S-863): 1998 2010

Dawning Corporation is an important player in the HPC market in China

existing product (Dawning-1, 1000, 1000 plus)
future product (Dawning-2, 2000, 3000, ...)

Support from SSTCC, Ministry of Electronic Industry and MOFTEC