

# Cbench Single Node Benchmark Report for Hostname dn826

February 15, 2008

## 1 Basic Node Description

Linux 2.6.9-55.0.9.EL\_lustre.1.4.11.1smp x86\_64 x86\_64 x86\_64 GNU/Linux  
Number of Physical Processors: 2  
Number of Processing Cores: 2  
Total Memory: 5970 MB

Processor Models:

- Intel(R) Xeon(TM) CPU 3.60GHz, 3591.366 MHz
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## 2 STREAM Results

streams add: 3727.0000 MB/s  
streams copy: 3535.0000 MB/s  
streams scale: 3631.0000 MB/s  
streams triad: 3864.0000 MB/s

### 3 STREAM2 Results

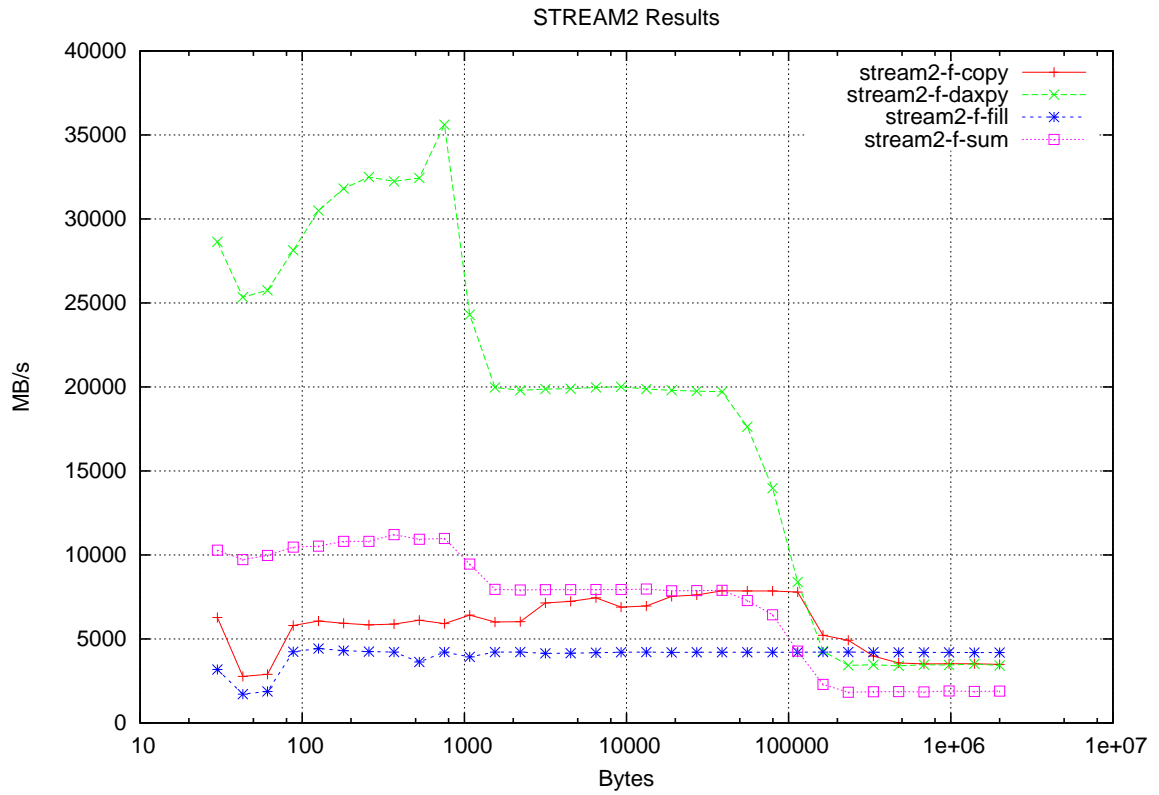


Figure 1: STREAM2 Data

## 4 Cachebench Results

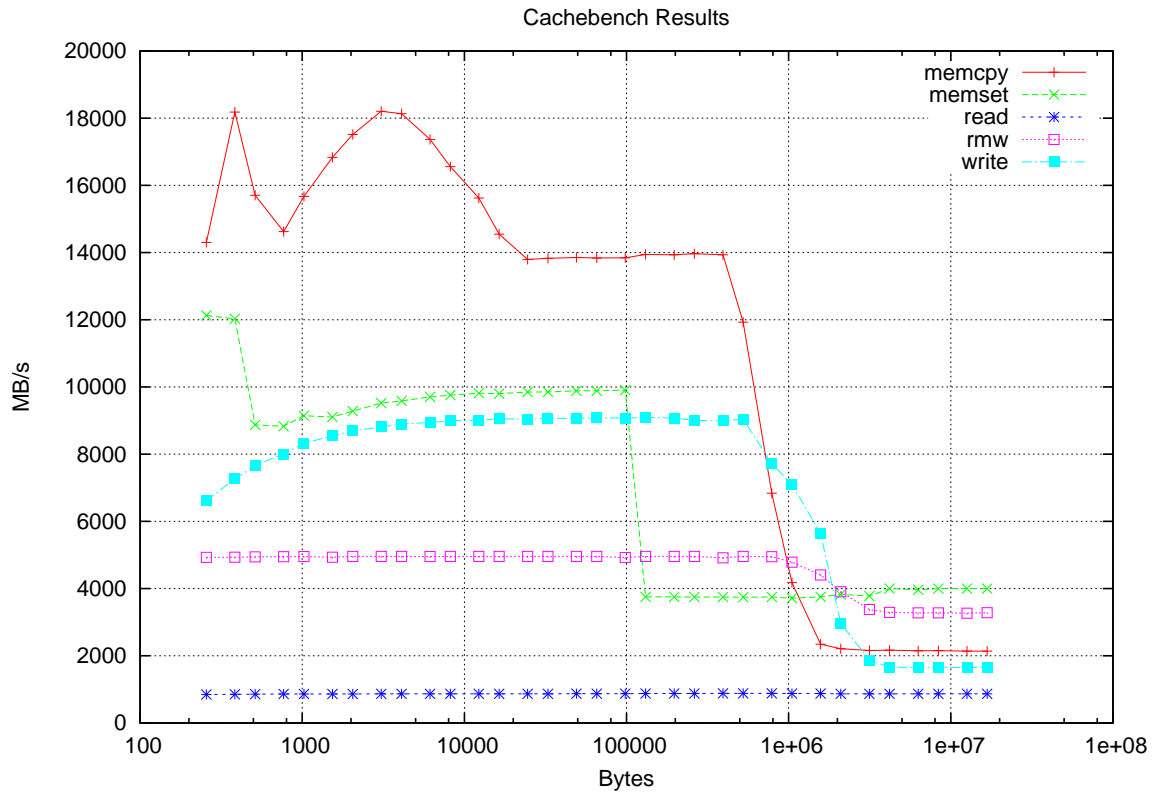


Figure 2: Cachebench Data

## 5 DGEMM Results

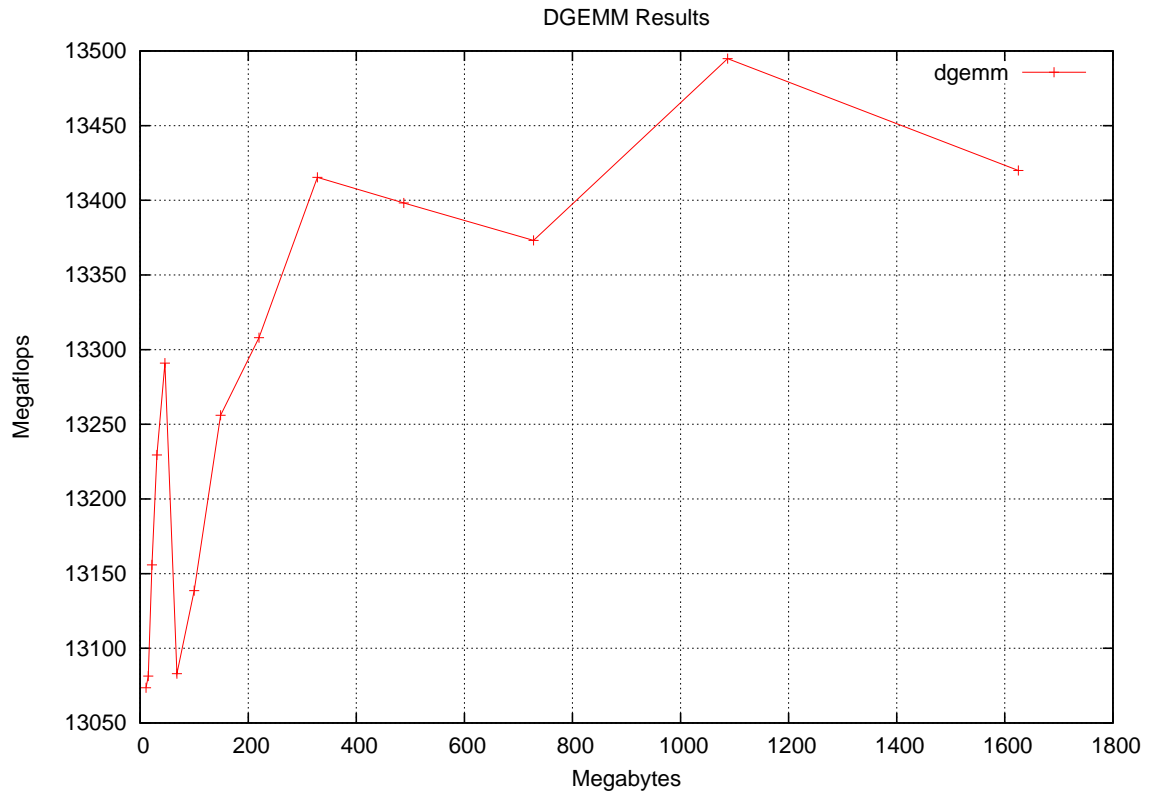


Figure 3: DGEMM Data

## 6 Multiple Process STREAMS Results (MPI Streams)

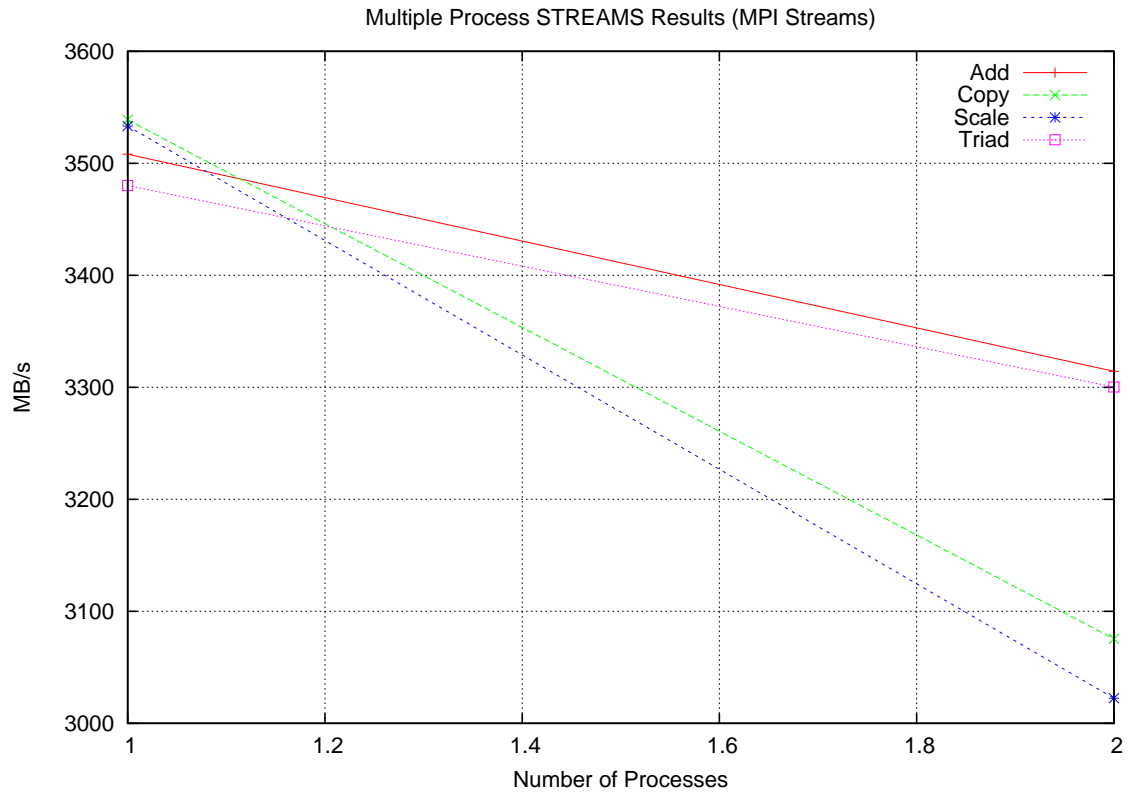


Figure 4: MPISTREAMS Data

## 7 Single Node Linpack Results

Memory Utilization Factors Used: 0.25,0.8,0.85

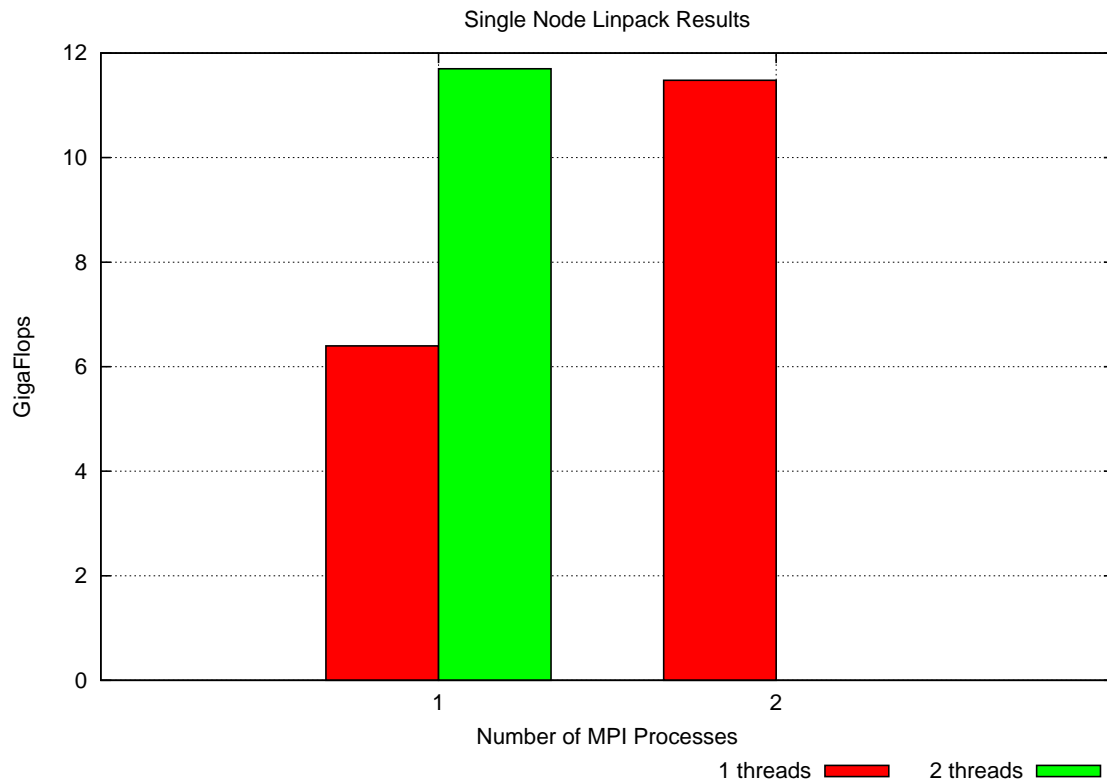


Figure 5: Linpack Data

This graph normalizes the Single Node Linpack data by the total number of computing threads so that scaling efficiency can more easily be seen. The total number of computing threads is product of the number of MPI processes and the number of BLAS threads.

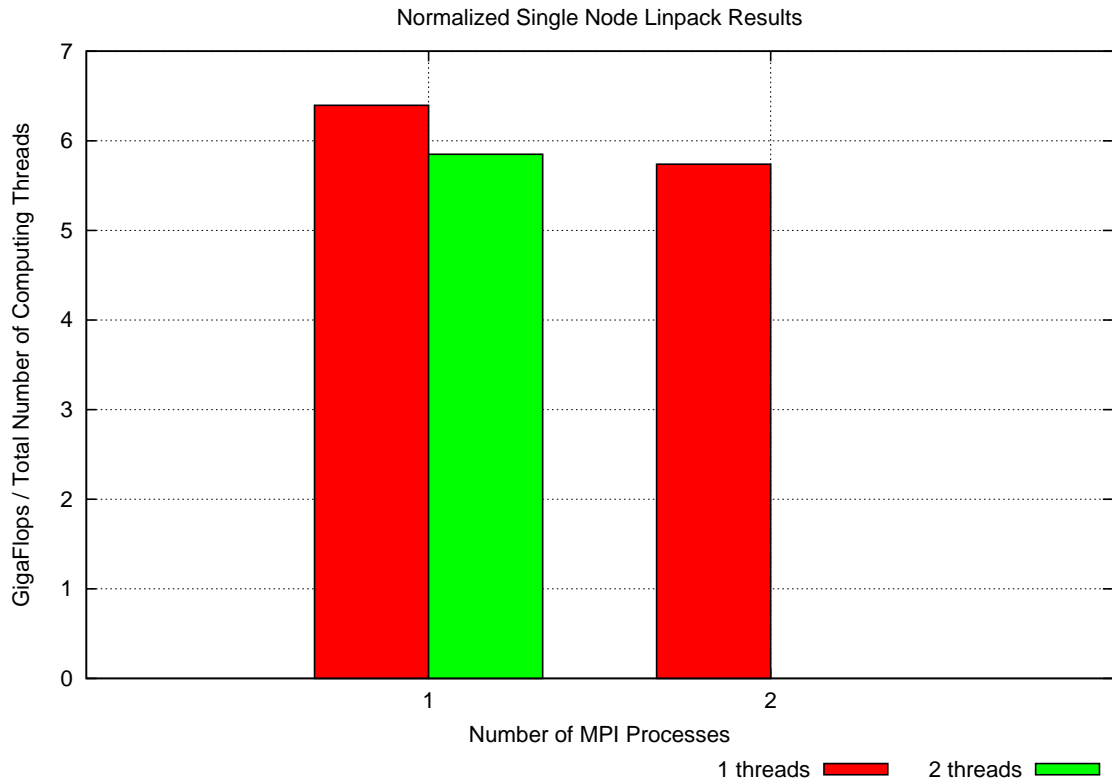


Figure 6: Normalized Linpack Data

## 8 Single Node NAS Parallel Benchmark Results

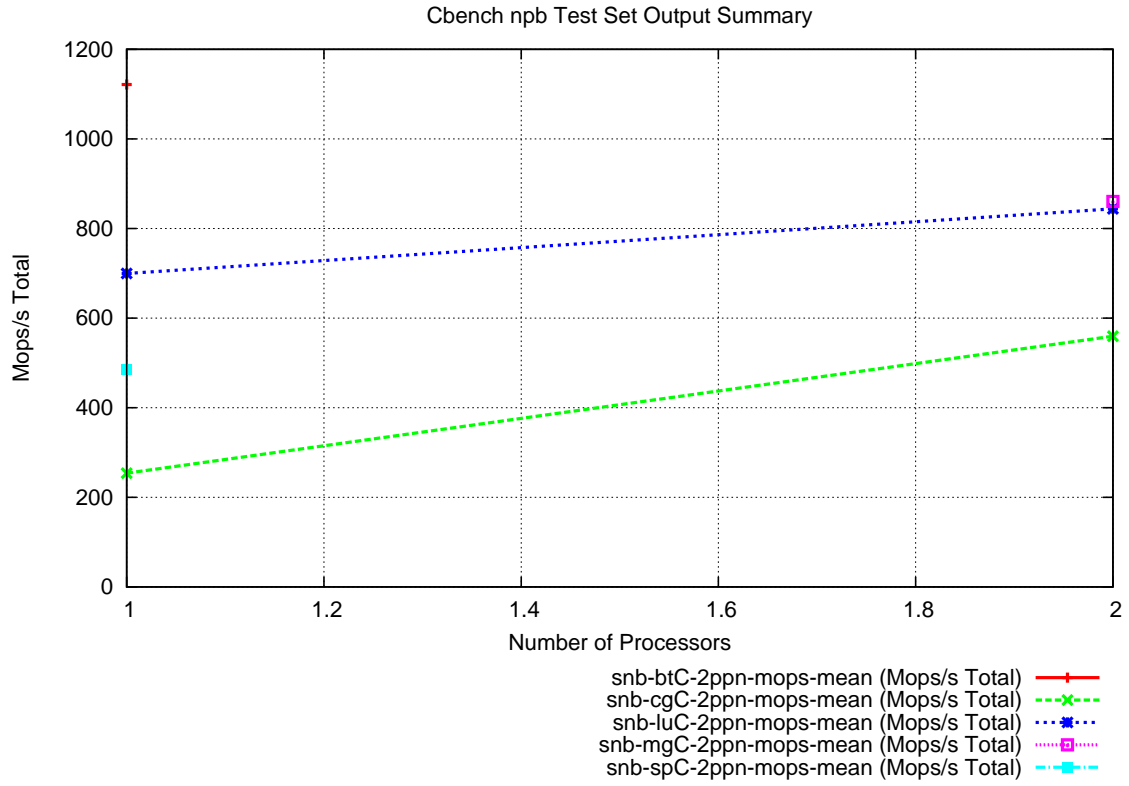


Figure 7: NAS Parallel Benchmark Data

This graph normalizes the NAS Parallel Benchmark data by the number of MPI processes so that scaling efficiency can be seen.

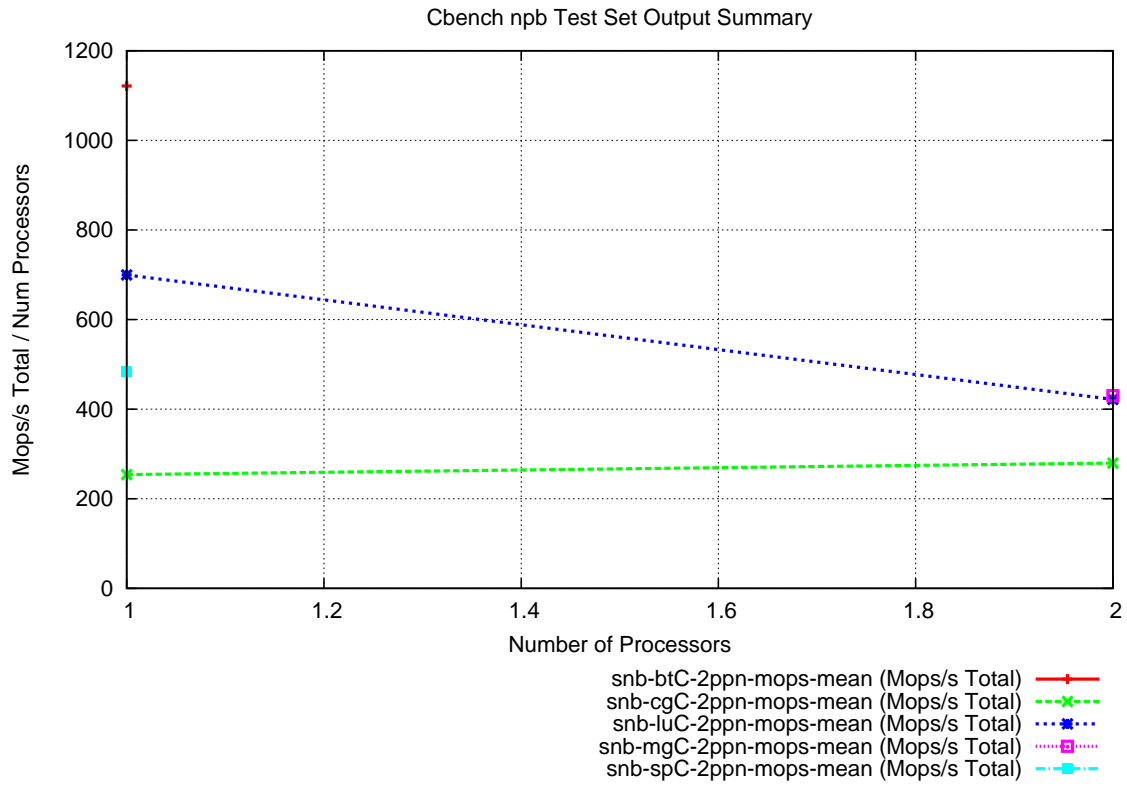


Figure 8: Normalized NAS Parallel Benchmark Data

## 9 Cbench Single Node Benchmark Run Details

Hostname of Benchmarked Node: dn826

Cbench Test Identifier for Benchmark Run: tbird-intel10