



PREMISE  
NETWORKS

A Division of Molex

# Molex Premise Networks cabling system

## molex in INTEL Technology Poland

**Intel Technology Poland Company** belongs to Intel Technology Group - a leading global supplier of highperformance data networking solutions, designs, develops, manufactures, and markets its products for large, geographically dispersed enterprises. It specializes in providing campus network connectivity solutions, advanced technical support services and ClearStep™ evolution strategies for networks in transition. The Company's products are distributed worldwide by a network of strategic partners and resellers.



**The Polish branch** is a crucial part of the scientific development and European service center. Its main task is creating software for Intel Technology's devices and equipment. Polish computer engineers help in creating the latest technological solutions.

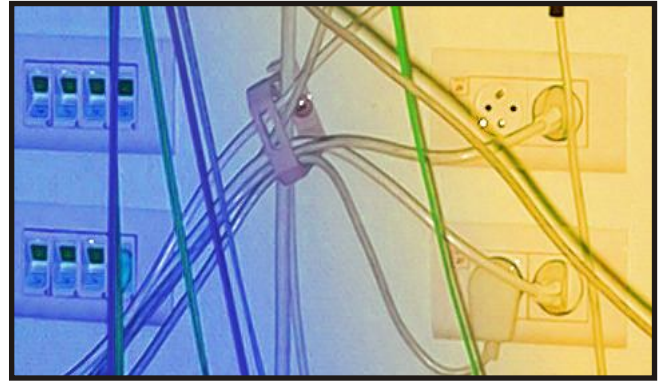
**In June 1997** we decided to erect a new building for our Polish branch. It had to ensure a high level of labour comfort and an effective harnessing of the possibilities given by the latest technology.

**Altogether** the created network covers 1635 lines of horizontal cabling produced in PowerCat technology by MOLEX PREMISE NETWORKS, 317 duplex lines MM horizontal cabling terminated in SC connectors on outlet points, 72 fibre MM in 12 fibre backbone cabling, 96 copper lines of backbone cabling [24 PowerCat cables to each SDF point). 100 km of PowerCat cable and 14 km of fibre optic cable were used to create this installation.

**The Main Distribution Centre** consists of six 47U switchboards connected to four indirect distribution points (IDF) containing altogether six 42U switchboards.

Professional quality of the installation works has been confirmed by 20-year guarantee Certificate on PowerCat System by MOLEX PREMISE NETWORKS.

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**All computer stations** own their structural cabling connector containing eight copper PowerCat lines and one duplex MM line associated with an electric powerpoint supplied by a separated electric network or supplied by an UPS. Both installations are under surface ones terminated by surface outlets.

**The backbone of the network** is based on ATM technology. CrossFire™ 9200 creates its foundations switches by Intel Technology. The switches are formed in a kind of quadrangle having a middle point. The speed on its edges equals 622 Mbps, and the speed towards the middle switch equals 155 Mbps. All that works in five LAN emulated networks so called ELAN networks. NT servers are concentrated on two switches. Each of them is equipped with two ATM RapidFire™ 6126 cards of 155 Mbps. They work in Clear Server configuration.



**This enables switching** the signal onto that card which will be currently switched on. Both cards are connected to two different switches. If one of them is not able to perform the connection, the card automatically switches onto the other switch.

**These enables** increased reliability of such a network so called Fault Tolerant Configuration. Besides all the NT servers are connected to each ELAN networks what does not require any routing in the case of serving clients from different ELAN networks.

**Clients are connected** to three remaining switches. The middle switch enables communication of the whole with external world by means of CF-8012 (XLV-F) routers produced by Intel Technology. They connect the Gdańsk branch with headquarters in Lyngby and Warsaw by means of WAN line. Each basic WAN line has got its, Backup Line, which in this case is an ISDN commuted line. The Backup Line connection is

automatically triggered in case of a too big traffic on the basic line or in a case of its damage. Such a mechanism is possible thanks to so called Dial Backup application of CF-8012, router. It is yet another element of so called Fault Tolerant Configuration.



**Employees of a firm** working in Ethernet networks are connected to the edge switches by means of CrossFrie™ 8005 switches. This configuration will be in future adjusted to the configuration working in Fast Ethernet standard. Besides, thanks to using a CrossFire™ 8600 switch with an ATM uplink connecting it to the ATM skeleton, the users can get connected to the network by means of Token-Ring cards.

**A 20-year Warranty Certificate** on PowerCat System has confirmed Professional quality of the installations by MOLEX PREMISE NETWORKS. The so created network gives a possibility of more effective and comfortable work for computer engineers employed by Intel Technology Poland. Solutions applied enable work of the network without any possible failure. The title SuperNet'99 given by MOLEX PREMISE NETWORKS, means it is the best network created in Poland in 1999.

