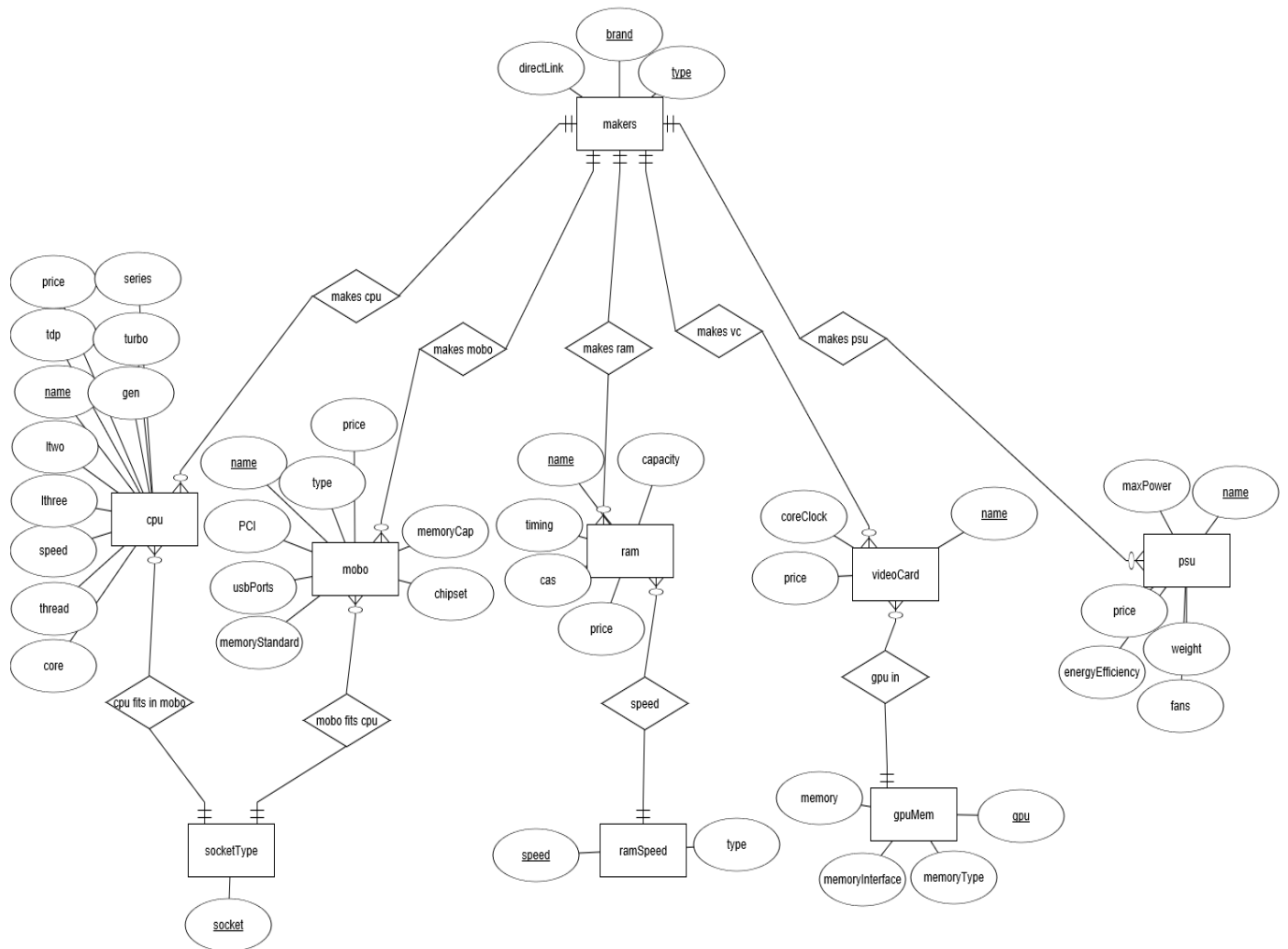


E/R Diagram



Relations

maker (brand, type, directLink)

socketType (socket)

ramSpeed (speed, type)

gpuMem (gpu, memory, memoryType, memoryInterface)

cpu (name, brand, gen, socket, core, thread, speed, lthree, tdp, price, series, turbo, ltwo)

videoCard(name, brand, coreClock, gpu, price)

ram (name, brand, capacity, speed, timing, cas, price)

mobo (name, brand, socket, chipset, memoryCap, memoryStandard, usbPorts, PCI, price, type)

psu (name, brand, maxPower, fans, energyEfficiency, weight, price)

Functional Dependencies

Maker: brand -> directlink

ramSpeed: speed -> type

gpuMem: gpu -> memory memoryType memoryInterface

cpu: name -> brand gen socket core thread speed lthree tdp price series turbo ltwo

videoCard: name -> brand coreClock gpu price

ram: name -> brand capacity speed timing cas price, timing -> cas

mobo: name -> brand socket chipset memoryCap memoryStandard usbPorts PCI price type

psu: name -> brand maxPower fans energyEfficiency weight price

SQL Schema

```
CREATE TABLE makers (  
  brand VARCHAR (30),  
  type VARCHAR (15),  
  directLink VARCHAR (60),  
  PRIMARY KEY (brand, type)  
);
```

```
CREATE TABLE socketType (  
  socket VARCHAR (12),  
  PRIMARY KEY(socket)  
);
```

```
CREATE TABLE ramSpeed (  
  speed INT,  
  type VARCHAR (15),  
  PRIMARY KEY (speed)  
);
```

```
CREATE TABLE gpumem (  
  gpu VARCHAR (30),  
  memory INT,  
  memoryType VARCHAR (10),  
  memoryInterface INT,  
  PRIMARY KEY (gpu)  
);
```

```
CREATE TABLE cpu (  
  name VARCHAR(30),  
  brand VARCHAR(5),  
  gen VARCHAR(15),  
  socket VARCHAR(12),  
  core INT,  
  thread INT,  
  speed DECIMAL(2,1),  
  lthree DOUBLE,  
  tdp INT,  
  price DECIMAL(6,2),
```

```

series VARCHAR(12),
turbo DECIMAL(2,1),
Itwo DOUBLE,
PRIMARY KEY(name),
FOREIGN KEY (brand) REFERENCES makers (brand) ON DELETE CASCADE,
FOREIGN KEY (socket) REFERENCES socketType (socket) ON DELETE CASCADE
);
CREATE TABLE videoCard (
name VARCHAR (30),
brand VARCHAR (30),
coreClock INT,
gpu VARCHAR(30),
price DECIMAL(6,2),
PRIMARY KEY (name),
FOREIGN KEY (brand) REFERENCES makers (brand) ON DELETE CASCADE,
FOREIGN KEY (gpu) REFERENCES gpumem (gpu) ON DELETE CASCADE
);
CREATE TABLE ram (
name VARCHAR (30),
brand VARCHAR (30),
capacity INT,
speed INT,
timing VARCHAR (15),
cas INT,
price DECIMAL(6,2),
PRIMARY KEY (name),
FOREIGN KEY (brand) REFERENCES makers (brand) ON DELETE CASCADE,
FOREIGN KEY (speed) REFERENCES ramSpeed (speed) ON DELETE SET NULL
);
CREATE TABLE mobo (
name VARCHAR (30),
brand VARCHAR (30),
socket VARCHAR (12),
chipset VARCHAR (15),
memoryCap INT,
memoryStandard VARCHAR (10),
usbPorts INT,
PCI INT,
price DECIMAL(6,2),
type VARCHAR (5),
PRIMARY KEY (name),
FOREIGN KEY (brand) REFERENCES makers (brand) ON DELETE CASCADE,
FOREIGN KEY (socket) REFERENCES socketType (socket) ON DELETE CASCADE,
FOREIGN KEY (type) REFERENCES makers (brand) ON DELETE SET NULL
);
CREATE TABLE psu (
name VARCHAR (30),
brand VARCHAR (30),

```

```
maxPower INT,  
fans INT,  
energyEfficiency VARCHAR (20),  
weight DOUBLE (4,2),  
price DECIMAL(6,2),  
PRIMARY KEY (name),  
FOREIGN KEY (brand) REFERENCES makers (brand)  
);
```